

CPA FLIGHT LINES

Vol. 2, No. 7

August 1985



John Simmance wins 1985 Class "A" Denver-Jackpot Air Race.



COLORADO PILOTS ASSOCIATION, INC.

P. O. Box 38555 Denver, CO 80238

PRESIDENT'S MESSAGE

By Vern Foster

Participation is the key to pleasure of the many Colorado Pilots Association's activities. The July 13 Denver to Jackpot Air Race is an example. For this great event, twenty CPA members shared in the excitement of putting together and operating this air race in a very professional manner. This is no small feat. The individuals made it a success by each doing a part and participating in the development of the plan beginning in March.

Mark July 12, 1986 on your calendar for next years 10th Annual Denver to Jackpot Air Race. This will be a very special event and if you would like to be a part of the air race committee next year, give me a call. I know you would enjoy this participation as much as I have the past few years.

Everyone is welcome at CPA events - bring your aviation friends, family members, etc. Keep in mind that while we may look upon CPA flying and educational activities as rather routine, others would be thrilled to be invited to go on a fly-in or attend a meeting.

Do not hesitate to go on fly-ins for any reason. If you would like any information or assistance, just look in the CPA Flight Lines and note that all officers and area representatives are listed with phone numbers - either on the front or back fly leaf. Among this list you will find someone who has flown every make and model of airplane, flown over every route, landed at every airport and made every mistake in the book. This vast pool of knowledge and experience is yours for the asking.

As for future activities, the FAA/CPA Wings program at Pueblo, the Saratoga, Wyoming fly-in and CPA convention are on the horizon. All these events will be interesting and exciting. Share the fun of attending and participating. BE THERE!

PRESIDENT

Vern Foster
303-751-9421

VICE PRESIDENT

George McCrillis
303-770-8284

SECRETARY

Wayne Thetford
303-697-9792

TREASURER

Don Vander Ploeg
303-757-1310

VICE PRESIDENT

AT LARGE
John D. Warrender
303-351-0892

Publication Notice

The CPA Flight Lines is published once each month. Articles for the CPA Flight Lines are sought from members and other persons or organizations. Stories and articles can include flying tips, rebuilding and restoration experiences, special trips, activities, etc.

All articles should be sent to:

CPA FLIGHT LINES editor

Terry Barbo
12579 E. Cedar Ave.
Aurora, CO 80012

Material for publication will be accepted up to the deadline date which appears in Flight Lines. Flight Lines staff reserves the right to accept, refuse, or edit any material submitted. Publication of articles and opinions in the CPA Flight Lines is not an endorsement by the Association, nor does the Association assume responsibility for the accuracy of the information contained in the Flight Lines. Permission is granted to reprint, provided credit is given to CPA Flight Lines.

PUBLISHER

Colorado Pilots
Association
P.O. Box 38555
Denver, CO 80238

EDITOR

Terry Barbo
303-367-0670

PRODUCTION

MANAGER
Lisa Thetford
303-697-9792

**NO MONTHLY MEETING
IN AUGUST**

**Copy Deadline For
September FLIGHT LINES
August 15**

NEWS BRIEFS

FRONT RANGE AIRPORT: Paving was begun 7-8-85 on the new runway 17/35 with final grading and the installation of lights to follow.. This runway is expected to be operational August 1.

The first executive hangar is under construction. This hangar will accommodate four or five aircraft.

The equipment for a Nondirectional Beacon is now on order. The installation of the NDB and the FAA approval of the Front Range NDB instrument approach is expected to take several months.

The new terminal building framework is up and rapidly taking shape. Completion is scheduled for December.

Sonny and Darlene Elgin flew their Apache to Jackpot and Sonny assisted in the M.C. activity at the awards party at Cactus Pete's.

Ranger Flying Club - Among the students who have recently soloed are: Holly Adams, Barry Brown, Pete Brautigam, Marj Tomes, Kenneth Day, George Wendt, Chad Schuman, Ken Roberts, Ron Carr, Kathy Hoffman, Frank Mintken and Jeff Krogstad.

Ranger is operating an evening and weekend ground school which is being taught by Larry Williams. Bill Scholl flew a Cessna 172 in the Jackpot Air Race.

JEFFCO: The Denver Air Center was co-sponsor of this year's Denver to Jackpot Air Race. Thanks to the cooperation of Dave Washburn and Jack Meador, we enjoyed the use of the large airplane showroom for the route and weather briefings plus the continental breakfast furnished, compliments of Denver Air Center.

Dave Meyer of Jeffco Tower gave the pilots a departure briefing. Dave Gordon, Airport Manager and staff furnished a new three-band radio for the drawing at the awards party at Jackpot.

The facility, formerly home for Aircraftco Beech, is now occupied by Jeffco-Air who sell fuel and handle tie-downs and storage. Aircraftco is no longer in business having been consolidated into the other Beechcraft operations in the Denver area.

STERLING: Dr. Curtiss Kimball and Dan Hoffman flew to St. Francis, Kansas, to attend the annual Stearman Fly-In on June 22. Five Stearmans were on hand. Sterling Air Service has been very busy towing sail planes from Boulder, Ft. Collins, Greeley and Loveland. They use a Bellanca Scout, 180 H.P., which is a great tow plane.

A contract has been signed with Isbill & Associates of Denver for the start of engineering services for the Sterling Airport.

Akron airport had a fly-in on June 22. Five balloons were there but only two were flown due to the unfavorable winds. A large crowd attended and breakfast was served. The Al Ward family put on a fine demonstration with several powered model airplanes.

DELTA: Glenn Cheney reports that he has been busy flying during the forest fire season.

The Jeffco Pilots Association recently paid a fly-in visit to Delta with six planes and eighteen people. They enjoyed the good food at the Spruce Lodge and the beautiful scenery of the area.

Mr. and Mrs. Charlie McCauley own a Piper Cherokee 180 and on July 12 Charlie received his Private License. The following day Mrs. McCauley got her long awaited airplane ride with the new pilot.

SALIDA: Merle and Marilyn Entz flew in the Jackpot Air Race. Merle was a fuel judge and did a great job of expediting the fueling. Merle also reported doing a lot of flying during the forest fire season.

GREELEY: John Warrender reports that runway 29/11 at Weld County Airport is now open full length after recent resurfacing. Runway 09, which is the ILS runway, now has a VASI installed. A PAPI is installed on runway 27 and is the first such installation in Colorado. In case you are curious, PAPI is Precision Approach Path Indicator, similar to a VASI.

John and Nancy Warrender flew in the Jackpot Air Race with Jim and Bonnie Noffisinger in a Turbo-Cessna RG. Tom and Louise Bein flew N-8554T in the Air Race. CPAer's Alan Kested

and David Warrender flew Commanche N7519P in the Jackpot Air Race.

PUEBLO: Lee and Flo Porter flew their Cessna 182 in the Jackpot Air Race and continued to Idaho and points north and west to visit relatives before returning to Pueblo later in the week. Lee assisted with M.C. chores during the Awards party at Jackpot. Arrangements are going forward for the FAA/CPA Wings program to be held at Pueblo September 13, 14 and 15. Flower Aviation will be host at their new hangar facility on the Pueblo Airport. According to Lee Porter and Mick Wilson of the FAA, lodging, dinner, etc., will be at the Ramada Inn.

SUMMIT COUNTY/KREMMLING/LEADVILLE: Ron and Donna Lewark arrived at Jeffco with the beautiful new red and white paint job on their Cessna 185. It was dawn patrol time for them as Ron was on hand early to conduct the pilot briefing. They were accompanied in the Jackpot Air Race by Doyle and Jane Stauffer.

MILE HIGH AIR DERBY

by Hal Gamble

Registration has started for the Colorado 99's Mile High Air Derby, scheduled for September 21 to depart from Front Range Airport in Adams County.

All entrants must have registration forms in by September 1 and race kits and information are available from Mile High Derby, 14437 West 32nd, Golden, CO 80401 for \$3, or phone (303) 278-4435.

The route this year will be from Front Range with mandatory fly-bys over

stops at Burlington, Las Animas and Alamosa in Colorado and termination at Taos, NM. The distance is 430 miles and all licensed pilots are eligible to enter. Entry fee is \$50.

A cash prize of \$1,000 goes to the first place winner with \$500 for second and \$200 for third place. Trophies also will be awarded the winners and leg prizes and door prizes will be given out at the cocktail party and awards banquet race night at Kachina Lodge in Taos.

9TH ANNUAL JACKPOT AIR RACE



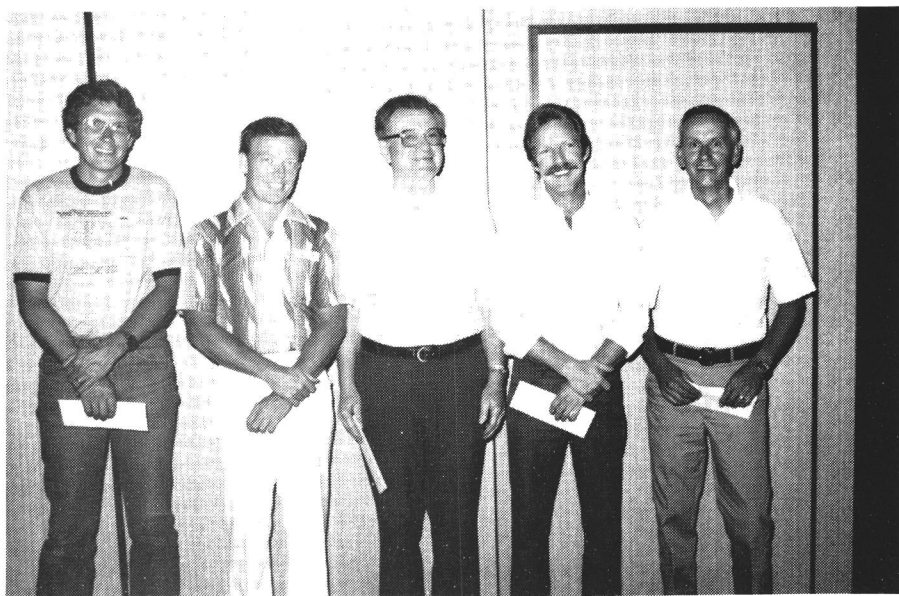
Registration at Jeffco



This utility pole served as the checkpoint for Rock Springs race officials.



Class "A" winners - right to left: 1st John Simmance; 2nd Ron Lewark; 3rd Tom Bein; 4th Bill Scholl; 5th Doug Sheets, and 6th Merle Entz.



Class "B" winners - right to left: 1st Wayne Thetford; 2nd George Anderson; 3rd Vern Foster; 4th Dave Burke, and 5th Steve Harless.



Class "C" winners - right to left: 1st Tom Koehler; 2nd Jim Noffsinger; 3rd Tom Daly, and 4th Gary Nelson.



Fuel Estimate Winners - right to left: 1st Bill Totten; 2nd Dave Burke; 3rd John Simmance, and 4th Tom Koehler.

HEARD ALONG THE FLIGHT LINE...

Have you noticed what "well kept secrets" are the individual strategies of pilots and crew preparing for the annual Denver-to-Jackpot Air Race? But arrival in Jackpot is typically followed by a period of relaxing ... and sometimes those well-kept secrets leak out. Some are worth noting for future competitions. For example:

JOHN SIMMANCE (winner of Class A) talked of the importance of navigation. He compared the course route to a string. If one varies periodically a few degrees from centerline and traces the path actually flown with a string, then pulls that string taut, the string is much longer than one tracing the centerline of the course. Makes sense! Couldn't help but notice, however, that John's winning airplane was squeaky clean. Running one's hand over a wing surface revealed it almost "sticky" to the touch ... similar to wing surfaces found on the small aircraft which compete in the Reno Air Races. Could it be that John is not revealing all?

Some could have benefited by John Simmance's sage advice. For example, it was reported that one competitor routed from Denver through Rock Springs via the Great Falls VOR. This may explain the flyby of the checkpoint at Rock Springs from north-to-south rather than east-to-west like everyone else. Wouldn't want to mention any names ... but the pilot's initials were JS.

There was a general observation that aircraft which are rented for the race tend to run faster than owner flown aircraft.

WAYNE THETFORD (winner of Class B) got an unbelievable 92% of the rated 190 mph out of his Commanche 250. Wayne will talk about pilot skills ... but the truth is that he flies that Commanche as if it were someone else's aircraft rather than his own. He hasn't heard about cruise settings. Can you imagine, 86 gal. fuel burn from Denver to Jackpot (which we understand is a new record high for single engine aircraft.) The word also is that Wayne is on his 2nd new engine (Firewall Forward) in two months. He burnt out the first one (while breaking it in) on a little excursion to Arizona last month.

DAVE BURKE, traditional rival to and flying buddy of Wayne, confides that Wayne was just dumb lucky. Dave took the low route up north via Poudre Canyon and ran into some severe turbulence. He explained that the back of his aircraft was filled with four sets of golf clubs ... including his friend Wayne's. Not wanting to damage Wayne's clubs, he had no choice but to throttle back his Mooney 201. As an ironic penalty for his thoughtfulness the best he could do was 4th in class.

According to the gossip, TOM DALY'S wife refused to fly with him. Seems it had something to do with Tom's flying his T182RG at too low an altitude. He was reported at one point on the route to have been "eye-ball-to-eye-ball" with a moose.

Others in her predicament would have scrubbed ... but not Barbara! Guess she figured a short trip to Jackpot with wheels down was nothing compared to her trip in the same Bonanza last year to Finland and back.

SUNNY ELGIN. Assistant Airport Manager at Front Range, made a "dry run" of the course in what appeared to be a 40-year old Piper Apache. He told others he intends to race next year. Rumor has it that Front Range will offer the airport as a departure point for next year's race. After the experience at Jeffco this year ... it will be a welcome change.

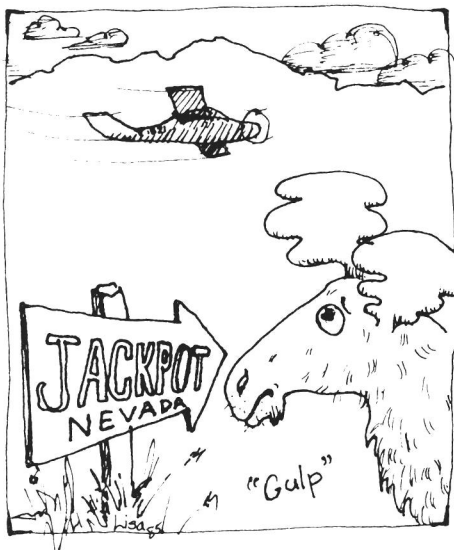
GOOD NEWS AT BACA

By Chet Jewell

As all of you may or may not know, the Inn at Baca Grande has been closed and for sale for several months. I talked with Manager Tom Mattarocchia and he informed me that the Inn has been purchased by John and Kitty Leauis.

The Leauis' are pilots and John has had an interest in purchasing and refurbishing older aircraft in Florida and Massachusetts. John has hopes and plans for further development of the Baca airport with considerable interest in overnight fly-ins. The Inn is currently under negotiation with a Chef from one of Ohio's top restaurants. The food at the Inn has always been good and they hope to uphold that tradition with some possible improvements. There are many other improvements being done at this time with many others planned for the near future.

The Inn should be open for full accommodations by the time this is printed, but you might call the Inn to verify this. Information on the Inn is available by calling the Inn at 1-256-4214.



DON VANDERPLOEG had the opposite problem. "Never got below 12,000 feet," he said. Of course, the head winds were pretty stiff at that altitude ... which probably accounts for why Don placed so poorly in the race. But his passengers certainly seemed relaxed (take heed, Tom) and as Don put it, "these races should also be for fun and relaxation." The race needs more Don VanderPloegs.

BARBARA FEY set a new record for her class: "wheels down normal aspirated retractable gear aircraft." Unfortunately, that was not one of the race categories. However, Barbara certainly deserves recognition as the "best sport" of the race. Minutes before the start she discovered a gear malfunction on her Beech 33 Bonanza which prevented gear retraction. No chance of finding a mechanic at 0530 am on a Saturday.



OH, NO! HERE COMES ANOTHER ONE!

By Fred and Liz Wheeler

Who's the guy with the tree leaves between his teeth? And the gal with clouds across her chest? Not Tarzan and not Wonder Woman. They're just two of the 29 fun loving DENVER to JACKPOT pilots and their 100 plus passengers.

Yet another of our CPA 'firsts': participation in this annual event that has, for 9 years now, caused the severe loss of hair for many pilots and some passengers too.

We were invited to become members of the Denver to Jackpot Air Race Planning Committee by Vern Foster and, with little hesitation, took on the task of preparing for the 9th Annual Race. We reasoned that some inconspicuous job would help us find out about the mysteries surrounding this event so that when we were ready to actually race we would know just what to do.

We soon became aware of the work involved in putting together all the many facets that make the race click off smoothly and grew to appreciate the work done by each Committee member and especially Vern Foster, Hal Gamble and Bruce Hulley, who gave so many hours to be sure all was ready on time.

Before we got control of ourselves we were entered in this race and with some professional advice (from a real race veteran), we were doing the same crazy things we had heard Colorado pilots do every year in July! Up at 4:00 am - hurry to Jeffco Airport to listen to a briefer - watch those little groups form a circle here and there going buzz, buzz (sec-

rets) - the taxi strip dash, and we're off!

We heard there was even some talk of flying an initial course of 180° just to confuse the competition - would you believe that? One plane lifted one wing to cross a peak and we saw several teepee residents fall to their knees asking for mercy.

One pilot decided the Rock Springs check point wasn't alert enough and flew across north to south just to add spice to the officials' lives. We heard someone say, "Where is that... da...power line?" and a passenger/ pilot was heard to instruct his pilot friend, "Just keep one wing in Idaho and the other one in Nevada along here."

But watch the last 60 or 70 miles. It's been said that there are pilots still wandering around out there looking for Jackpot from past year's air races.

And then - there it is - Jackpot, Nevada. Even the airport.

It's all worth it though, especially when the evening's entertainment includes a surprise appearance by Hal "Elvis" Gamble. Someone was "Oooo, I'm All Shook Up" even without severe turbulence. Great performance, Hal!

After all that, we still don't know what's going on but it sure was fun and - next year's another year!

Hope you'll decide to join us.

ADDITIONAL JACKPOT WINNERS

Several Jackpot participants became winners during the drawing for door prizes at the Awards Cocktail Party following the announcement of the race category winners.

Recipients of ten dollar bills donated by CACTUS PETE'S were: Karen Schnuerle, Joe Webb, Fred Wheeler, Nancy Warrender, Gary A. Nelson, Kevin Wheeler, Louise Bein, Donna Lewark, Shelly Totten, Lisa Thetford, Sandy Prestien, Edward K. Wolanski, Jr., John Warrender, Dave Burke, Diane Daly, "TC" Costin, Craig Gueswel, Randy Schnuerle, Lois Richardson, George Neavada, Roger Garther, Jan Nelson, Ken

Peterson, Sue Burke, Jack Quella, Monty Montague, Rubye Tielder, Nancy Jewell and Greg Passloe.

Winners of wine donated by HAL GAMBLE were: Bruce L. Prestien, Chet Jewell, R. Lewark and Flo Porter.

Merchandise prizes donated by DAVE GORDON and JEFFCO AIRPORT STAFF, AVIALL, FRONT RANGE AIRPORT and SONNY ELGIN were won by: Terry Barbo, Bonnie Noffsinger, Bill O'Brien, Colette Simmance, Dave Burke, Sonny Elgin and Daryl Staw.

CONGRATULATIONS TO -

CPAer BABETTE ANDRE on the launching of her new magazine, WINGS WEST, last month. We wish her the very best of success in her new venture.

HAL GAMBLE
Aviation Insurance
 CENTENNIAL AIRPORT
 ●
 (303) 790-7102



* * * * *

* **Reminder -** *

* Have you made your reservation *

* for SARATOGA? *

* Please let Frank or Vanita Gallo *

* (337-5864) or Terry Barbo (367-0670) *

* know that you are going. *

* * * * *

PLACE	CLASS	N #	PILOT NAME	AIRCRAFT	YEAR/TYPE	RATED MAX SPEED	TOTAL TIME	AVERAGE SPEED	% OF MAX SPEED
1	A	2480V	JOHN SIMMANCE	PIPER	1985 PA 28-181	148	04:04:13	129.4752	87.4832%
2	A	70006	RON LEWARK	CESSNA	1971 185	178	03:24:30	154.6210	86.8657%
3	A	8554T	TOM BEIN	CESSNA	1960 182	170	03:41:37	142.6788	83.9287%
4	A	5884E	BILL SCHOLL	CESSNA	1979 172	143	04:24:02	119.7576	83.7466%
5	A	6638B	DOUG SHEETS	BEECH	1979 C23 SUNDOWN	147	04:16:52	123.0989	83.7407%
6	A	5151E	MERLE ENTZ	CESSNA	1982 182	168	03:46:05	139.8599	83.2500%
7	A	6519E	TIM ROBERTS	CESSNA	1984 182	168	03:49:07	138.0083	82.1478%
8	A	8549S	LEE PORTER	CESSNA	1965 182	170	03:48:45	138.2295	81.3115%
9	A	84479	KEN PETERSON	CESSNA	1973 182	170	03:54:46	134.6869	79.2276%
10	A	8718T	BOB FIGGIE	CESSNA	1961 182	170	03:55:58	134.0020	78.8247%
11	A	8074W	CHET JEWELL	PIPER	1965 PA 28-180C	152	04:29:43	117.2341	77.1277%
12	A	71200	LENARD ADLER	CESSNA	1969 182	170	04:03:27	129.8829	76.4017%
13	A	5435E	T. C. COSTIN	CESSNA	1979 172	143	04:56:22	106.6922	74.6099%
14	A	5503T	BILL TOTTEN	CESSNA	1964 172	139	05:06:15	103.2490	74.2798%
15	A	2524X	DON VANDER FLOEG	CESSNA	1965 206	177	04:05:33	128.7721	72.7526%
16	A	8711T	PAUL ADAMS	CESSNA	1960 182	170	04:32:26	116.0651	68.2736%
1	B	7858P	WAYNE THETFORD	PIPER	1962 PA 24-250	190	03:00:50	174.8571	92.0301%
2	B	8229M	GEORGE ANDERSON	CESSNA	1970 210	200	02:53:46	181.9682	90.9841%
3	B	6110T	VERN FOSTER	CESSNA	1980 182RG II	184	03:18:11	159.5492	86.7115%
4	B	201WN	DAVE BURKE	MOONEY	1978 M20J 201	201	03:01:42	174.0231	86.5787%
5	B	3407X	STEVE HARLESS	MOONEY	1966 M20E	193	03:10:11	166.2606	86.1454%
6	B	7519P	ALAN KESTED	PIPER	1971 PA 24-180	167	03:49:35	137.7278	82.4717%
7	B	719SG	BRUCE FRESTIEN	BEECH	1968 V35A	210	03:11:55	164.7590	78.4567%
8	B	7149U	FRED WHEELER	MOONEY	1964 M20E	193	04:04:23	129.3869	67.0398%
9	B	2181Q	JOHN SHAW	CESSNA	1974 177RG	180	04:26:30	118.6492	65.9162%
10	B	9520Q	BARBARA FEY	BEECH	1966 C33A	210	04:20:04	121.5842	57.8972%
1	C	3467Q	TOM KOEHLER	PIPER	1978 PA28-R201T	204	03:04:30	171.3821	84.0108%
2	C	4684T	JIM NOFFSINGER	CESSNA	1981 T182RG	215	03:03:15	172.5512	80.2564%
3	C	4649S	TOM DALY	CESSNA	1980 T182RG	215	03:03:19	172.4884	80.2272%
4	C	732SD	GARY NELSON	CESSNA	1977 T210M	235	02:49:45	186.2739	79.2655%

1985 DENVER-JACKPOT RACE RESULTS-SPEED BY CLASS

1985 DENVER-JACKPOT FUEL RESULTS

PLACE	CLASS	N #	PILOT NAME	AIRCRAFT	YEAR/TYPE	FUEL EST	TOTAL FUEL PURCHASED	FUEL DIFF	% FUEL DIFF
1	A	5503T	BILL TOTTON	CESSNA	1964 172	45.60	46.2270	0.6270	1.3750%
2	B	201WN	DAVE BURKE	MOONEY	1978 M20J 201	51.80	52.5690	0.7690	1.4846%
3	A	2480V	JOHN SIMMANCE	PIPER	1985 PA 28-181	43.50	42.7600	0.7400	1.7011%
4	C	3467Q	TOM KOEHLER	PIPER	1978 PA28-R201T	51.24	52.1650	0.9250	1.8052%
5	B	2181Q	JOHN SHAW	CESSNA	1974 177RG	44.50	43.5050	0.9950	2.2360%
6	A	70006	RON LEWARK	CESSNA	1971 185	53.00	51.3680	1.6320	3.0792%
7	A	71200	LENARD ADLER	CESSNA	1969 182	52.00	53.9850	1.9850	3.8173%
8	A	6519E	TIM ROBERTS	CESSNA	1984 182	48.50	50.4200	1.9200	3.9588%
9	A	5435E	T. C. COSTIN	CESSNA	1979 172	40.27	38.4350	1.8350	4.5567%
10	A	8549S	LEE PORTER	CESSNA	1965 182	44.20	46.2450	2.0450	4.6267%
11	A	2524X	DON VANDER FLOEG	CESSNA	1965 206	60.00	62.8700	2.8700	4.7833%
12	A	5884E	BILL SCHOLL	CESSNA	1979 172	42.50	40.1770	2.3230	5.4659%
13	B	7519F	ALAN KESTED	PIPER	1971 PA 24-180	37.80	35.6410	2.1590	5.7116%
14	A	5151E	MERLE ENTZ	CESSNA	1982 182	42.90	45.4400	2.5400	5.9207%
15	B	6110T	VERN FOSTER	CESSNA	1980 182RG II	44.00	40.6750	3.3250	7.5568%
16	A	6638B	DOUG SHEETS	BEECH	1979 C23 SUNDOWN	48.50	43.9300	4.5700	9.4227%
17	B	719SG	BRUCE PRESTIEN	BEECH	1968 V35A	44.10	48.9950	4.8950	11.0998%
18	B	7858F	WAYNE THETFORD	PIPER	1962 PA 24-250	76.00	86.0100	10.0100	13.1711%
19	B	9520Q	BARBARA FEY	BEECH	1966 C33A	68.50	58.4150	10.0850	14.7226%
20	A	8718T	BOB FIGGIE	CESSNA	1961 182	56.00	66.2230	10.2230	18.2554%
21	C	4649S	TOM DALY	CESSNA	1980 T182RG	72.00	58.7710	13.2290	18.3736%
22	C	4684T	JIM NOFFSINGER	CESSNA	1981 T182RG	57.60	68.9850	11.3850	19.7656%
23	B	8229M	GEORGE ANDERSON	CESSNA	1970 210	51.00	40.5150	10.4850	20.5588%
24	A	84479	KEN PETERSON	CESSNA	1973 182	39.00	49.7250	10.7250	27.5000%
25	A	8554T	TOM BEIN	CESSNA	1960 182	44.90	58.2310	13.3310	29.6904%
26	A	8711T	PAUL ADAMS	CESSNA	1960 182	53.00	69.1110	16.1110	30.3981%
27	B	7149U	FRED WHEELER	MOONEY	1964 M20E	36.90	49.8250	12.9250	35.0271%
28	B	3407X	STEVE HARLESS	MOONEY	1966 M20E	45.80	65.2990	19.4990	42.5742%
29	A	8074W	CHET JEWELL	PIPER	1965 PA 28-180C	22.20	69.4150	47.2150	212.6802%

PROP BALANCING

By Fred Norton



Having recently overhauled both my "slow poke" Aircoupe, 5455F, and its engine, a desire to have "everything perfect" surfaced. One area that I could do nothing about were the vibrations I sensed at certain engine speeds. The C-90 fires in what I feel is an illogical sequence, i.e. both cylinders on one side fire then both on other side. I assumed this was part of the problem but that a proper prop balancing would help.

Since the prop was overhauled at the same time as the engine, balancing in place was the final act. I had read several articles about the advantage of dynamic balancing. I was ready ... except for price ... estimated at \$200 and up. An ad in the "N. M. Flyer" solved that problem. Robertson Aircraft, the original operator in the new general aviation area at ABQ advertised dynamic balancing for only \$75. And the trip from Denver to ABQ promised to be a nice X-C to boot. The trip was decided for the July 4th weekend. I called and made an appointment with Dave Husbands of Robertson Aircraft for Friday, July 5.

I have provided a synopsis of several articles on the technical aspects of dynamic prop balancing at the end of this article. For the Aircoupe the tough part was getting the vibration detecting transducer attached to housing immediately behind the prop. I assume larger aircraft have more clearance in this area and would not present the same challenge.

On the Coupe it required quite a bit of time, plus a very cooled down engine, to get this attachment made. Once the transducer was attached and strobe unit set up it took only a minute or so to determine my condition. My bad news was that the vibrations I detected would have to be accepted. The good news was I had close to perfect prop/engine balance at 2,200 rpm, the static speed selected. Perfect would be to have the prop strobe in a vertical position with '0' vibration on sensor. My test came out approximately 5° off vertical with .025 vibration and a pronouncement that it couldn't be improved.

At least I now know all is well and a fun trip, our first real X-C in

the Coupe, were combined. A few "highlights" of the trip were a) a 25 kt almost direct tailwind most of the way ... will have to remember that for a long time; b) being sequenced for take off on ABQ R/W, 08 (13,373') in between two 737s. It was hot and I guess they wanted to make sure that I didn't run off the end of the runway. A "lowlight" was discovery that the bird is out of rig. Since "every little bit helps" really

applies to a Coupe I have my next project determined.

I was most impressed with Robertson Aircraft and endorse the dynamic balancing process. So give them a call, (505) 242-2751 and see if you can improve your engine/prop vibration problem. Robertson is a family operation, Dad/Mom/Daughter/Son-in-law (Dave) and just a nice place to visit.

DYNAMIC PROP BALANCING EXPLAINED

The following is excerpted from a Chadwick-Helmuth Co. letter (this is the company that manufactures the testing equipment discussed in all articles I have read and one used by Robertson):

"Why dynamic balance? Basically, dynamic balance reduces the harmful vibrations produced at the one-per-revolution rate of the rotor or propeller being balanced. This results in a smoother ride, reduced wear and tear on the aircraft, and provides an important additional benefit of long-term savings on maintenance cost to the aircraft owner. This discussion applies equally as well to turbine and reciprocating engine aircraft, large and small.

Dynamic balance differs from static balance, in that static balance forms only the beginning of the

total balance requirement and is usually accomplished only at the time of propeller overhaul. The propeller is usually statically balanced without spinner and attaching hardware, and without consideration of differing aerodynamic forces on the blades when in motion. Dynamic propeller balance is accomplished on the aircraft in normal operating conditions, thereby producing precise results unattainable by other methods. A common, but coarse analogy is to compare this procedure to dynamic wheel balance when changing tires.

Procedures for use of the VIBREX are simple and straightforward. A typical light aircraft propeller dynamic balance can be accomplished in less than an hour. Experience at Chadwick-Helmuth indicates that approximately eighty percent of all aircraft checked had pronounced, correctable high vibration levels."

PARAPHRASING ARTICLES ON BALANCING

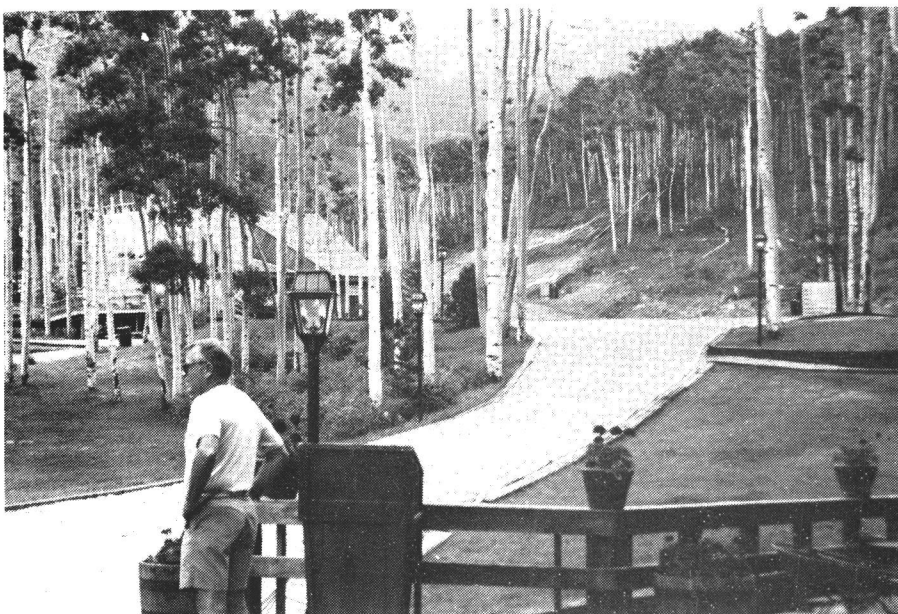
Excessive vibration, often caused by an out-of-balance prop, can lead to premature component failure. The blade should be balanced during initial installation and after an overhaul, spinner replacement, or removal of large nicks.

Imbalance is measured in IPS (inches per sec) which represents displace-

ment of one inch per sec from normal track. A reading above .2 IPS would be considered out of balance. A transducer senses the heavy side of a prop and causes a strobe to fire. Through application of washers around the spinner base a minimum IPS reading can be achieved which equals minimum vibration.



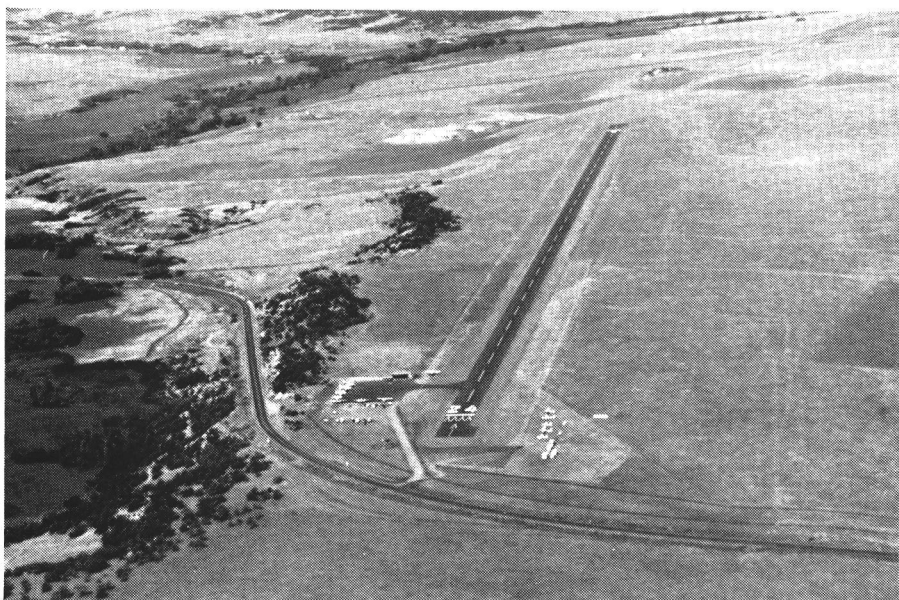
Mayor Gary Mayfield (front left) hosted our fly-in and provided transportation for the Cuchara side trip. Councilman Ron Pavlick (front right) was our driver.



Frank Gallo surveys the well-kept secret and hidden beauty of the new Cuchara Ski Resort.



Participants in the LaVeta Fly-In. The Lear 25 joined us unexpectedly.



LaVeta's 60' x 5800' runway.

FIRST KNOWN AIRPLANE FLIGHT MANUAL

Instructions issued with the 1911
Glen Curtiss "Pusher"

Rules Governing the Use of Aeronautical Apparatus

1. The aeronaut should set himself in the apparatus, and secure himself firmly to the chair by means of the strap provided. On the attendant crying "Contact" the aeronaut should close the switch which supplies electrical current to the motor, thus enabling the attendant to set the same in motion.

2. Opening the control valve of the motor, the aeronaut should at the same time firmly grasp the vertical stick of control pole which is to be found directly before the chair. The power from the motor will cause the device to roll gently forward and the aeronaut should govern its direction of motion by use of the rudder bars.

3. When the mechanism is facing into the wind, the aeronaut should open the control valve of the motor to its fullest extent, at the same time pulling the control pole gently toward his (the aeronaut's) middle anatomy.

4. When sufficient speed has been attained the device will leave the ground and assume the position of aeronautical ascent.

5. Should the aeronaut decide to return to terra firma, he should close the control valve of the motor. This will cause the apparatus to assume what is known as the "gliding position" except in the case of those flying machines which are inherently unstable. These latter will assume the position known as "involuntary spin" and will return to earth without further action on the part of the aeronaut.

6. On approaching closely to the chosen field or terrain, the aeronaut should move the control pole gently toward himself, thus causing the mechanism to alight more or less gently on terra firma.



COLORADO AVIATION CALENDAR

AUG 3-4

ROCKY MOUNTAIN AIRSHOW, Fort Collins/Loveland Airport. Featuring Warbirds of Confederate Air Force, Jim Franklin, John Kazian, Blackhawk Aerobatic Team, and others. Info: Larry Priest 224-4320.

AUG 10-11

Lake McConaughy (Nebraska) Fly-In, jointly sponsored by Colorado Pilots Association & Jeffco Pilots Association, overnight camping, fishing, waterskiing. Info: Walt Bell 758-1970.

AUG 18

AVIATION HISTORICAL SOCIETY PICNIC, at Norm Meyers Ranch near Conifer. Site is airport shown as Broken Bar M Ranch on Denver Sectional. Aviation public and supporters welcome. Airport is RESTRICTED ... recommend that participants drive. Info: Dody Engle 755-9241.

AUG 24

STEAMBOAT SPRINGS AIRSHOW, Routt County STOLPORT, sponsored by EAA Chapter 649 and Steamboat Aviation. Info: Terry Bentley 879-1204.

AUG 31-SEP 1

SARATOGA, WYOMING OVERNIGHT FLY-IN, sponsored by Colorado Pilots Association. Easily accessible to West Slope and East Slope flyers. Fun weekend of golf, tennis, swimming, rafting, fishing and other social activities. Info: Frank Gallo 337-5864.

AUG 31

DENVER AEROBATIC CLUB CALHAN AEROBATIC CONTEST. Practice and registration on August 30. Rain date Sunday, September 1. Public invited. Info: Mike Ryer 1-621-2282 (H) 977-7182 (W)

SEP 7-8

ROCKY MOUNTAIN REGIONAL FLY-IN, Greeley-Weld County Airport, sponsored by EAA. Info: Bill Marcy 986-4398

SEP 13-15

DENSITY ALTITUDE AND WINGS SAFETY CLINIC, Pueblo Municipal Airport. Cosponsored by Colorado Pilots Association and FAA Flight Standards District Office. Participants receive 3 hours of free dual (participants aircraft) and qualify for FAA Wings Program. Free "Pinch Hitter Course" for non-pilots. Info: Mick Wilson 466-7326, Vern Foster 751-9421 or Lee Porter 547-3339 (Pueblo).

SEP 20

DEDICATION OF CONTROL TOWER and Administration Building Complex, Centennial Airport. Info: Bill Fitzgerald 790-0598.

SEP 21

MILE HIGH AIR DERBY, Sponsored by Colorado 99's. The 400 mile race starts at Front Range Airport and ends at Taos, NM via Burlington, Las Animas and Alamosa. Race is open to all interested pilots. Overnight activities scheduled at Taos. Info: Linda Horn 278-4435.

SEP 28-29

COLORADO INTERNATIONAL AIRSHOW, Pueblo Memorial Airport, USAF Thunderbirds (Flying F-16's) one day only on SEP 29, Warbirds in flying and static display, Black Hawks, Tahoe Aces, Bill Warren's Flying Circus, Earl & Paul Cherry, and US Army Golden Knights Parachute Team. Info: Louise 544-1001 or (800) 542-SHOW.



Los Gringos y Amigos

By Wayne Thetford

Yes it is hard to believe but 13 Gringos got into Mexico, and all returned to the good ol' USA with nothing more than 5 days of fun in the sun, a lot of good food, a few drinks and some pretty good scuba diving, not to mention the fellowship of a bunch of really great people.

The flying weather was sooper, we even had a tail wind going down, only 5 hours to Guaymas, we were there by noon. When we got there our reservations were all in order thanks to Gary Goldstein, the owner of the dive shop.

We also had chartered two boats for



The gang boating out for a day of scuba diving.



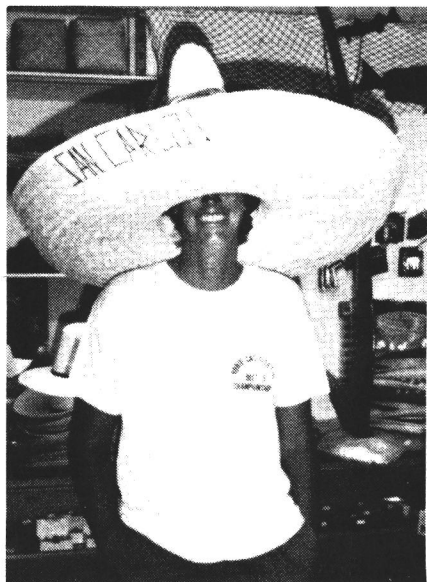
The Gringo hacienda - a 5 bedroom, 5 bath house on the beach.

three days, with Gary to take us diving. Gary did a fine job of taking care of us, picking us up every morning and returning us to the hotel after the dives.

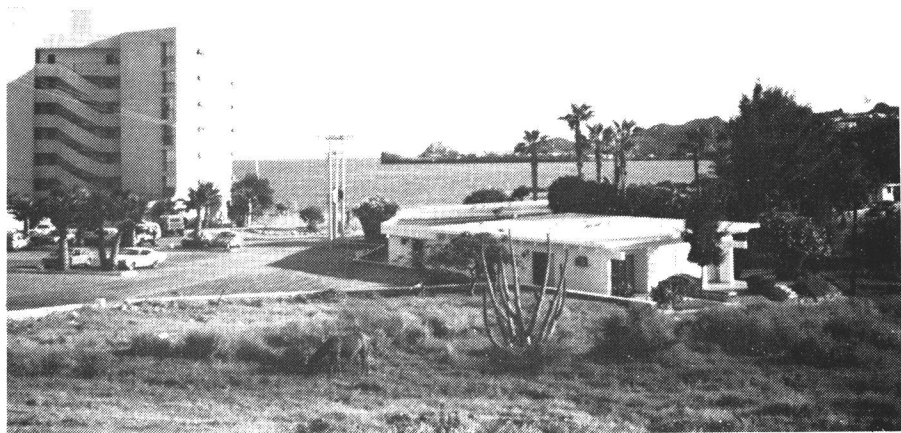
The only dissapointment we had was the water was not as clear as it usually is this time of year, however the diving was very interesting. We saw a lot of marine life, including some things you don't see very often. Like sea snakes and octopus.

The return trip is always harder than going. I think it must be a condition of the mind, and something to do with the thought of a nice trip being over.

The only thing in the near future for the Gringos is the Reno air races September 13-16. Some of us will be going out to see them.



Jan Monahan - one of those high class Gringos!



San Carlos Bay



Dining in style!



Being transported to the border?
No, just to the boat.

AREA REPRESENTATIVES

STERLING Dan Hofmann
(H) 522-4444

WRAY Lucile Bledsoe
(H) 332-5143 (O) 332-4955

BURLINGTON Larry Mack
(O) 346-5352

PUEBLO Lee Porter
(H) 547-3339 (O) 547-3339

CANON CITY Jim Hogan
(H) 275-2830 (O) 275-1420

SALIDA Merle Entz
(H) 539-4683 (O) 539-4683

DELTA Glenn Cheney
(O) 874-3368

GREELEY John Warrender
(H) 351-0892 (O) 353-9629

LOVELAND Glenn Channell
(H) 667-5964 (O) 667-5964

BRUSH Jim Wood
(H) 842-3283 (O) 842-5061

BOULDER/LONGMONT Dick Mansfield
(O) 449-8484

LEADVILLE/KREMMLING/SUMMIT COUNTY
Ron Lewark

(H) 668-3089 (O) 668-3093

COLORADO SPRINGS Steve Blucher
(H) 597-5683

Pat James (O) 574-1602

MEADOW LAKE-PEYTON Cliff Clemens
(H) 646-4810

Printing of the flyer courtesy of



Tumbleweed Press

3240 West 71st Avenue #7 • Westminster, Colorado 80030 • (303) 427-0282



Paper donated by **DAVE BURKE**

Colorado Pilots Association
P.O. Box 38555
Denver, CO 80238

CPA

