

CPA FLIGHT LINES

Vol. 3, No. 6

August/September 1986



Alan Kested (standing) and crew averages 184.7089 mpg for fastest speed of 1986 Denver-Jackpot Air Classic.



COLORADO PILOTS ASSOCIATION, INC.

P. O. Box 38555 Denver, CO 80238

PRESIDENT'S MESSAGE

by Vern Foster

What makes Colorado Pilots Association tick?

As I write this, it is one week since the 10th Annual Denver-Jackpot Air Classic was operated. I cite this event as an example of the combined efforts of many members--in this case, a committee of some two dozen members and spouses working for several weeks with pride and professionalism to assure that the event operated smoothly.

Other major events such as the Greeley Poker Fly-In, the FAA/CPA Wings Safety Programs, the Colorado Springs and Pueblo Safety Meetings, Burlington Fly-In, Wray Fly-In, CPA Mountain Flying Course, etc., are further

examples of the great support and work of many CPA members and spouses. In many cases members live in locations where it is only possible for them to attend a function occasionally. Others may have demanding schedules which permit them to attend functions only rarely, nevertheless, these members lend important support by their continued membership.

The effectivity of the combined contributions of each member is seen in our steady increase in membership, plus our ever-increasing prestige and status as an aviation organization. We are active in such matters as airspace utilization, legislation affecting aviation, flight safety, pilot education and operating costs.

We can proudly proclaim that Colorado Pilots Association is truly "The Voice of General Aviation in Colorado."

So---What makes Colorado Pilots Association tick? Answer---Each and every member!!!



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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:

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**Copy Deadline for
FLIGHT LINES
20th of the month**

if timely in nature; other
Material for publication welcome anytime.

NEWS FROM THE U.S.P.A.

At the annual meeting of the United States Pilots Association held June 13-15, hosted by the North Dakota Pilots Association in Grand Forks, new officers were elected for the 1986-87 year.

Elected were: President, ROBERT McCLURE, Kansas City, Missouri, retired TWA flight captain and past president of the Missouri Pilots Association; First Vice President, SHANELLE HAM, North Little Rock, Arkansas, past president of the Arkansas Pilots Association; Second Vice President, DR. BOB WORTHINGTON, Canyon, Texas, noted aviation writer and West Texas State

University management professor; Treasurer, J. DONALD VANDER PLOEG, C.P.A., Denver, Colorado, treasurer of the Colorado Pilots Association; and Secretary, DR. GENE MORRIS, Denton, Texas, a practicing dentist.

The Board appointed as Executive Director, ARNOLD W. ZIMMERMAN, JR., C.P.A., St. Louis, Missouri, past president of the Missouri Pilots Assn. and founding president of the U.S.P.A.

Re-elected as Northwest Mountain Region Vice President was WALTER BARBO, Aurora, Colorado.

U.S.P.A. ENDORSES PRODUCT LIABILITY BILL

The U.S.P.A. Board of Directors announced their support of legislation pending in the U.S. House of Representatives introduced by Rep. Dan Glickman (D-Kansas) which would establish federal standards and guidelines in product liability cases involving general aviation aircraft. HR 4142 would include federal court jurisdiction in all general aviation liability cases; manufacturer liability for products in a defective condition unreasonably dangerous for its intended purpose on the date of manufacture; placing the burden of proof of negligence on the claimant; comparative responsibility attributed to claimants conduct; several liability of defendants; 12 year statute of limitations on claims; restrictions on the award of punitive damages; a time limit of two years for filing claims; and

other provisions providing for the payment of and liability for legal fees.

The U.S.P.A. Board called on all of its members and other pilots to actively support this bill. "We are concerned," said the Board, "that the products liability crisis not only threatens the survival of the general aviation industry due to the economic impact but that it will impede the improvements and advances in the design of products so vitally necessary to improve the safety of current or future products. We have difficulty reconciling the continuously improving safety record of general aviation with the alarming increase in the per unit cost of product liability insurance, which reportedly is now in excess of \$70,000 per aircraft manufactured."





CPA FLY-IN TO AMIGO INTERNATIONAL AIRSHO and USPA DIRECTORS MEETING *El Paso*, Texas - September 26-28



Friday, 26 Sept.

All day - arrival Cutter Beechcraft, ELP.

11:30 a.m.-5:00 p.m - Lunch in Old Mexico, then guided shopping tour in Juarez.

6:00-7:00 p.m. - Cocktails in USPA hospitality suite.

7:00-8:00 p.m. - "Make-your-own-sandwich" buffet by hotel swimming pool.

8:00-10:00 p.m.- Aviation education seminars in hotel.

10:00 p.m. - Adjourn to hospitality suite.

Saturday, 27 Sept.

8:00 a.m. - Coffee and juice.

8:30 a.m. - 11:30 a.m. - Directors Meeting.

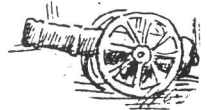
Noon - Depart for Amigo Airsho and special chalet tent at Airsho.

5:00 p.m. - Return to hotel.

6:30 - 7:30 p.m. - Cocktails in hospitality suite.

7:30 - 10:00 p.m. - Banquet and guest speaker.

10:00 p.m. - Return to hospitality suite.



Sunday, 28 Sept.

Open schedule. Depart at your leisure. Since Airsho will be at Biggs Army Airfield, there should be no conflict with departure plans and Airsho delays.

Aircraft Parking: USPA will use Cutter Beechcraft at El Paso International Airport. FBO manager Joe Jackson will provide free parking and a 25 cent/gallon fuel discount. A special reception will be held at the FBO for USPA with margaritas and soft drinks, and then transportation to the USPA hotel. USPA requests all pilots purchase gas.

Hotel: The Hilton, located on the airport about one block from Cutter.

Meals: ★ Friday:

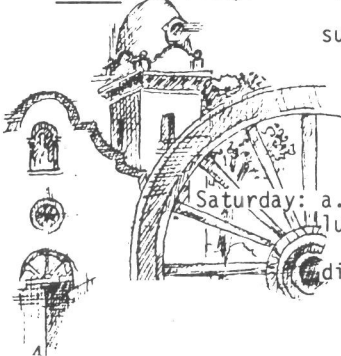
lunch - catered authentic Mexican luncheon in Paso Del Norte Restaurant in Juarez.

supper - "build-your-own-sandwich" buffet:
fresh fruit cup, soup du jour, potato salad, tossed green salad, sliced roast beef, ham and turkey, domestic cheese platter, sliced tomatoes, cucumber salad, assorted pastry try, and beverage.

Saturday: a.m. coffee and juice.

lunch - all you want to eat and drink all afternoon in the chalet at Airsho.

dinner - Western buffet: salad bar, roast steamship round of carved beef, barbecue beef brisket, fried chicken, cottage





potatoes, ranch style beans, corn on the cob, rolls and butter, beverage;
OR

- Steak tampiquena sit down dinner with salad, vegetable, rolls, butter, beverage and dessert.

Costs: Hilton Hotel - single/double \$45 (+ tax)/night. Make reservations directly with hotel, phone 915 778-4242. Holiday Inn (not on airport) - has special Amigo Airsho rates of \$32 and \$36/night, phone 915 778-6411.

Amigo Airsho: Tickets for the chalets are available on a first come, first serve basis at \$15 each. The Airsho has 300 chalet tickets available which cover admission to the show, refreshments and seating in the tents. These are available to many special fly-in groups, not just USPA. For tickets send \$15 for each person to: TRESA ELLISON, General Manager, Amigo Airsho, El Paso Chamber of Commerce, P. O. Box 9738, El Paso, TX 79987 (phone 915 545-2864). Indicate you are a USPA member.

Other Costs:

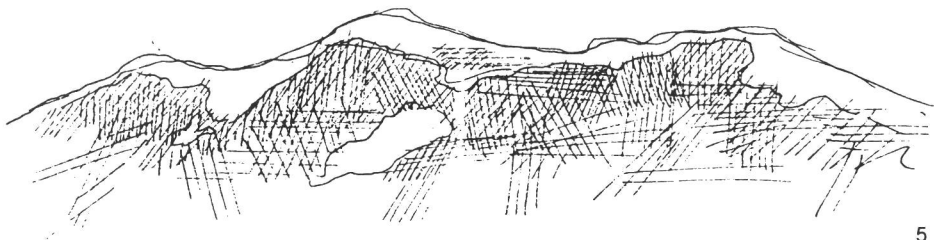
Friday Luncheon/shopping trip to Mexico	\$25/person
Friday "build-your-own-sandwich" supper	\$10/person
Saturday coffee & juice, Banquet, and Hosp. Suite	\$30/person
TOTAL package (EXCEPT hotel and Airsho)	\$65/person

Reservations and checks for the above MUST be received by BOB WORTHINGTON, Rt. 3, Box 536, Canyon, TX 79015 NO LATER THAN 12 September to guarantee reservations.

Total USPA weekend costs per couple	
Hotel (room & tax, Friday & Saturday)	\$101.70
Amigo Airsho	30.00
All other events	130.00
Total	\$261.70



AIRSHO Activities: United States Navy Blue Angels-Jet Team
Bill Warren & the Daring Damsels-Aerobatic & Wing Walk Act
Jim Myning-Comedy & Novelty Routine
Mike Wigen-Aerobatic Act
Coors Skydiving Team-Jump Team
First Annual Trade Show & Antique Car Show
Entertainment
Model Airplane Performances each morning
AND MUCH MUCH MORE!!!



IS THERE A PROBLEM IN USE OF PHILLIPS X/C II AVIATION OIL?

by Walt Barbo

There will be a lot of press on this issue soon. There is already a lot of rumor . . . rumor so prevalent it is difficult to ignore, particularly if one is carrying around a crankcase full of X/C II in their personal aircraft. If you are part of that group, you may be interested in what I found out (or didn't find) in trying to research the problem.

Those of you who read Aviation Safety (Belvoir Publications, Inc.) may have noticed an obscure article in The Squawk Box section of the August 1 issue. It described a Lycoming engine problem in which an exhaust valve stuck in the open position, contacted the piston, and bent the pushrod. Disassembly revealed a heavy buildup of varnish on the valve guide. The engine had been operated over 900 hrs. on Phillips XC (original formula) and had been changed to X/C II 33 hrs. prior to engine failure. Aviation Safety noted two other reports were filed on the same day, each with the same problem --and each with less than 50 hrs. on the new oil.

My next contact was Jeffco Pilots Association President Walt Bell. Walt is an EAA type who bases a Mooney M-20 at Jeffco and practically lives on the airport. He sees and hears everything that goes on . . . including several engine incidents that could have resulted from use of X/C II. This alarmed Walt such that he immediately changed the X/C II he was using in the M-20 to a different oil. Walt alerted me also that Phillips 66 had distributed a service letter to its dealers pulling X/C II off the market.

A call to Service Oil revealed that there was such a letter.

They offered to let me read it -- but not copy it. (Incidentally, those of you who haven't discovered Service Oil, you will find that they offer the best case prices on aviation oil of any place in town.) The letter was under date of June 16 over the signature of W. Peter Buhlinger, Manager Libricants. Some key excerpts follow:

"X/C II was conceived, tested, and introduced for the express purpose of advancing aviation engine oil technology. The chemistry was thoroughly researched and tested, and results in field use have been excellent. Very stringent testing was conducted by the University of Illinois with engines reputed to be 'most severe' in their lubrication requirements. In-flight testing was done under very adverse circumstances as compared with normal operations. Since introduction, X/C II has received widespread public acceptance, has been a winner in race competition, and, of course has been monitored by Phillips in general aviation use. Technically, X/C II has performed extremely well.

Unfortunately, X/C II did not undergo tests by certain engine manufacturers. Because such tests are no longer performed by these manufacturers, X/C II is, therefore, not considered by them as 'approved' oil. As a consequence of this, and the stance of various manufacturers with regard to their warranties, X/C II has suffered from a groundswell of rumors that we deem totally unfounded and unsubstantiated. These innuendos, inferences, and questions are, perhaps, a result of the poor economic climate within the aviation industry that has left a

void in new oil development and a lack of support for this technology by engine manufacturers. The lack of their activity on new oil development, as well as their failure to grant endorsements, gives little opportunity for the survival of a new product.

The actions described above, among others, have caused Phillips to reevaluate its position of pressing for the enhancement of aviation oil quality. In view of this radical market environment, Phillips is discontinuing production of X/C II Aviation Oil effective June 10, 1986."

Attempts to reach Mr. Buhlinger of Phillips 66 on July 24 were not successful, however, we did talk to Mr. Dennis Boggs of the same department who was kind enough to add to our information.

He told us that X/C II had an "antiwear additive" consisting of a zinc compound. The oil was certified for aviation use under

an STC issued by the Southwest Region of the FAA in Atlanta, Georgia. It was introduced on the market in August of 1985 at which time the old formula was being phased out.

According to Dennis, April of 1986 was the start of the bad press on X/C II. He attributes part of the problem to an over-zealous FAA GADO in Illinois which was requiring a Form 337 log book entry with each oil change. Commercial operators complained because of excess paperwork (Form 337s require an AI log book entry), plus it raised an insurance liability issue. Following this (per Dennis), Lycoming took a position that use of the oil would void engine warranties and proceeded to blame every engine incident on faulty oil.

Dennis also told us that another letter was being sent to each of its dealer outlets (date of July 24) in which an offer is made to exchange inventory of X/C

PEOPLES BANK
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WANTS to make AIRPLANE LOANS
to individuals and small companies on
single engine and small twins.
For more information, please contact
John Stedeford or Ken Hay at
364-2621.
9635 Montview Blvd.
AURORA, COLORADO



MEMBER FDIC

II for the original formula for anyone with concerns about the quality of the oil. Production of the old formula started on July 23 and should be widely available in 4-6 weeks.

A conversation with CPA member Carlos Suarez (flies a Cessna Cardinal RG out of Jeffco) confirmed that Phillips 66 is following through on this policy. Carlos had been using the X/C II in his Cardinal. He drained out a fresh oil change because of the bad press on the oil and exchanged his unused inventory for a different oil at Service Oil. There was no argument and, in fact, a representative from Phillips 66 gave him a personal call to explain the background of the issue.

Our next contact was Wayne McCannon, Principal Airworthiness Inspector with the FAA FSDO at Broomfield. He confirmed that the STC acquired by Phillips 66 for the X/C II (in the absence of approval by engine manufacturers) requires a one-time Form 337 approval for use in individual aircraft.

This creates a rather interesting dilemma for a lot of aircraft owners. With an aviation fleet that numbers over 200,000, an estimated one half use Phillips 66 oils. And Wayne estimates less than 5% of those have Form 337's on their aircraft. If true, there are a lot of violators out there . . . including your author.

The FAA may not be cause for worry. Wayne said it is unlikely that the FAA would pursue compliance. A greater concern could be the effect on insurance . . .

if an accident happens with a noncompliant aircraft.

We also contacted a number of FBO's and a renown engine overhaul shop north of Denver regarding problems experienced with X/C II. Understandably, these contacts resulted in guarded discussion . . . due primarily to the absence of good evaluative information. It is worth noting, however, that contact with Aero Associates at Jeffco brought out the interesting observation that one of their Mooney 231 tenants had become alarmed at the bad press on X/C II. After changing to a competitive brand, the 231 immediately experienced high oil consumption. Switching back to X/C II returned oil consumption back to normal.

An additional contact with CPA member Fred Jaeger (Airport Manager at Greeley) gives some insight of how some FBO's are handling sales of X/C II. The airport will sell the oil to any buyer--but will place oil in only those aircraft with a Form 337 clearance. Others must put in their own oil.

This story is not complete. Rumors are rampant. There are two sides to the issue and as pilots and aircraft owners, we are caught in the middle again. The problem, of course, will take care of itself with exhaustion of X/C II inventories. In the interim, it may be prudent for those who intend to stockpile and continue using the product to obtain a Form 337 to use the STC.

Expect additional press on this issue.





CPA POKER FLY-IN

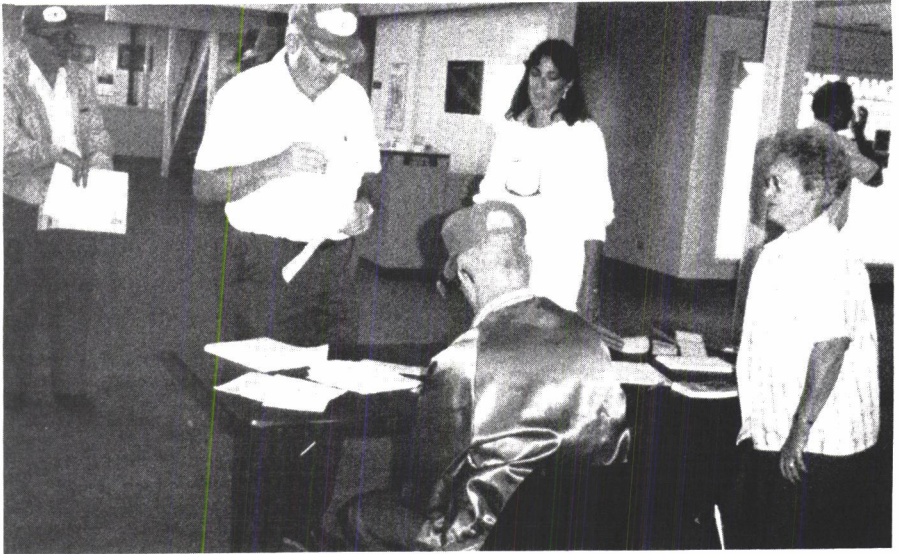
Lunch time for CPAs and friends at Greeley on June 14.

Photo: Frank Medina of Englewood

CPA MOURNS LOSS

The Colorado Pilots Association mourns the death of member, TOM DUGAN, of Longmont, as a result of a midair collision over Boulder on July 26, 1986. CPA extends its most sincere condolences to Tom's family on their loss.

1986 DENVER TO JACKPOT



Registration desk at Front Range Airport.



Bob Sumner (right) fraternizes with race officials at RKS. The group overshadows his record setting Mooney Mite. He won "The Turtle Award".



Terry Barbo and Garry Valentine (RKS Airport Manager) were your timers again at Rock Springs.



Jim and Helen Dykes relax for a few minutes at RKS after losing over an hour on the first leg because of weather.



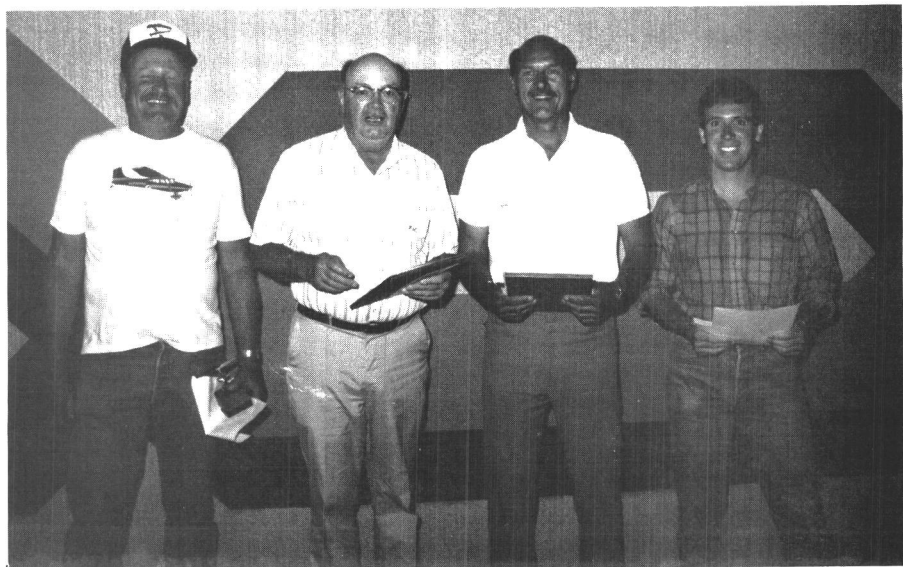
T. C. Costin repairs a minor mechanical problem at RKS.

DENVER-JACKPOT RACE RESULTS-SPEED BY CLASS

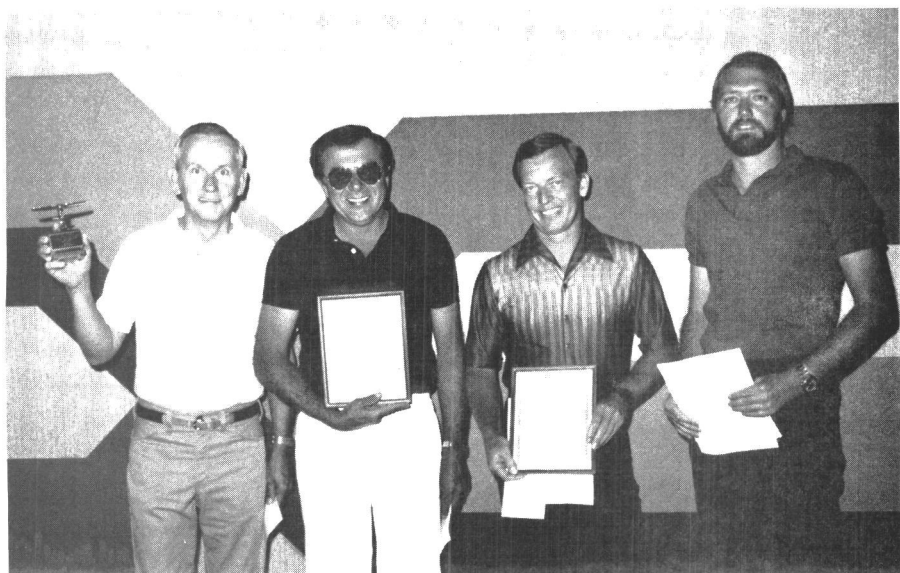
PLACE	CLASS	N #	PILOT NAME	AIRCRAFT	YEAR/TYPE	RATED MAX SPEED	TOTAL TIME	AVERAGE SPEED	% OF MAX SPEED
1	A	70006	RON LEWARK	CESSNA	1971 185 E	178	03:31:50	157.7655	88.6323%
2	A	8554T	TOM BEIN	CESSNA	1960 182 C	170	04:05:50	135.9458	79.9681%
3	A	871BT	BILL FIGGIE	CESSNA	1960 C-182	170	04:05:57	135.8813	79.9302%
4	A	63227	BILL CHEAVRON	CESSNA	1985 C-172	151	04:36:54	120.6934	79.9294%
5	A	9247X	BILL TOTTEN	CESSNA	1962 182 E	170	04:06:53	135.3676	79.6280%
6	A	8711T	PAUL ADAMS	CESSNA	1960 182	170	04:16:24	130.3432	76.6725%
7	A	6134D	VANITA GALLO	PIPER	1958 PA 22-150	140	05:38:08	98.8368	70.5977%
8	A	84KG	GRETCHEN JAHN	MAULE	1984 M5-180C	170	04:48:01	116.0350	68.2559%
9	A	5435E	T. C. COSTIN	CESSNA	1979 172	143	05:47:34	96.2003	67.2730%
10	A	5233L	JIM DYKES	PIPER	1969 PA 28-180D	152	06:18:12	88.3659	58.1355%
1	B	7858P	WAYNE THETFORD	PIPER	1962 PA 24-250	190	03:16:32	170.0475	89.4987%
2	B	5807K	ALAN KESTED	BEECH	1965 S-35	212	03:00:56	184.7089	87.1268%
3	B	201WN	DAVE BURKE	MOONEY	1978 M20J 201	201	03:13:45	172.4903	85.8161%
4	B	7463N	CHET JEWELL	BEECH	1968 V-35 A	210	03:10:18	175.6174	83.6274%
5	B	3280F	JIM ROWE	MOONEY	1967 M-20 F	185	03:44:13	149.0523	80.5688%
6	B	719SG	JOHN QUELLA	BEECH	1968 V-35 A	210	03:19:19	167.6729	79.8442%
7	B	9520E	SONNY ELGIN	BELLANCA	1976 17-30A	191	03:42:21	150.3036	78.6930%
8	B	9717R	BILL RICHARDSON	BEECH	1960 M-35	210	03:25:34	162.5750	77.4167%
9	B	4771R	BILL SCHOLL	CESSNA	1980 172RG	166	04:25:28	125.8915	75.8383%
10	B	8274D	LARRY MERKOWITZ	BEECH	1958 J-35	210	03:30:18	158.9158	75.6742%
11	B	9121V	ROBERT ANDERSON	MOONEY	1961 M-20-B	190	04:11:35	132.8387	69.9151%
12	B	8759A	LEONARD ADLER	BEECH	1949 A 35	184	05:02:48	110.3699	59.9836%
13	B	4052	BILL SUMNER	MOONEY	MITE	142	08:12:20	67.8808	47.8034%
1	C	4649S	TOM DALY	CESSNA	1980 T182RG	215	03:04:54	180.7463	84.0681%
2	C	3467Q	TOM KOEHLER	PIPER	1978 PA28-R201T	204	03:17:36	169.1296	82.9066%
3	C	4684T	JIM NOFFSINGER	CESSNA	1981 T182RG	215	03:11:06	174.8823	81.3406%
4	C	6801B	KEN PETERSON	CESSNA	1978 T210M	235	03:02:00	183.6264	78.1389%
5	C	732SD	GARY NELSON	CESSNA	1977 T210M	235	03:07:43	178.0343	75.7593%
6	C	737FS	NEIL KEDDINGTON	CESSNA	1979 T182RG	215	03:31:44	157.8401	73.4140%

DENVER-JACKPOT FUEL RESULTS

PLACE	CLASS	N #	PILOT NAME	AIRCRAFT	YEAR/TYPE	FUEL EST	FUEL RKS	FUEL 06U	TOTAL FUEL PURCHASED	FUEL DIFF	% FUEL DIFF
1	B	3280F	JIM ROWE	MOONEY	1967 M-20 F	42.20	20.90	21.5860	42.4860	0.2860	0.6777%
2	A	6134D	VANITA GALLO	PIPER	1958 PA 22-150	47.50	24.30	24.1590	48.4590	0.9590	2.0189%
3	B	8274D	LARRY MERKOWITZ	BEECH	1958 J-35	45.10	0.00	44.0230	44.0230	1.0770	2.3880%
4	A	8718T	BILL FIEGIE	CESSNA	1960 C-182	64.60	40.90	22.0390	62.9390	1.6610	2.5712%
5	B	9717R	BILL RICHARDSON	BEECH	1960 M-35	48.40	25.30	25.0500	50.3500	1.9500	4.0289%
6	B	9121V	ROBERT ANDERSON	MOONEY	1961 M-20-B	42.00	0.00	40.2380	40.2380	1.7620	4.1952%
7	A	70006	RON LEWARK	CESSNA	1971 185 E	59.00	0.00	55.8260	55.8260	3.1740	5.3797%
8	C	4684T	JIM MOFFSINGER	CESSNA	1981 T182RG	59.70	20.00	43.4060	63.4060	3.7060	6.2077%
9	B	7195G	JOHN QUELLA	BEECH	1968 V-35 A	58.40	0.00	54.2210	54.2210	4.1790	7.1558%
10	B	4771R	BILL SCHOLL	CESSNA	1980 172RG	38.00	24.00	16.8290	40.8290	2.8290	7.4447%
11	B	5807K	ALAN KESTED	BEECH	1965 S-35	58.00	20.00	32.8610	52.8610	5.1390	8.8603%
12	A	9247X	BILL TOTTEN	CESSNA	1962 182 E	49.20	26.40	27.5450	53.9450	4.7450	9.6443%
13	A	84K6	GRETCHEN JAHN	MAULE	1984 M5-180C	44.00	0.00	48.8610	48.8610	4.8610	11.0477%
14	A	5435E	T. C. COSTIN	CESSNA	1979 172	39.40	20.60	23.2610	43.8610	4.4610	11.3223%
15	B	9520E	SONNY ELGIN	BELLANCA	1976 17-30A	50.20	15.00	41.1530	56.1530	5.9530	11.8586%
16	B	8759A	LEONARD ADLER	BEECH	1949 A 35	39.60	0.00	44.3440	44.3440	4.7440	11.9798%
17	A	8554T	TOM BEIN	CESSNA	1960 182 C	45.01	24.40	28.4980	52.8980	7.8880	17.5250%
18	A	8711T	PAUL ADAMS	CESSNA	1960 182	61.00	20.00	30.1750	50.1750	10.8250	17.7459%
19	A	6322T	BILL CHEAVRONT	CESSNA	1985 C-172	44.70	28.20	24.4540	52.6540	7.9540	17.7942%
20	C	6801B	KEN PETERSON	CESSNA	1978 T210M	56.50	0.00	45.8350	45.8350	10.6650	18.8761%
21	C	3467Q	TOM KOEHLER	PIPER	1978 PA28-R201T	56.70	0.00	69.4310	69.4310	12.7310	22.4533%
22	B	7463N	CHET JEWELL	BEECH	1968 V-35 A	45.50	0.00	56.7570	56.7570	11.2570	24.7407%
23	C	737FS	NEIL KEDDINGTON	CESSNA	1979 T182RG	53.20	0.00	39.9860	39.9860	13.2140	24.8383%
24	A	5233L	JIM DYKES	PIPER	1969 PA 28-180D	47.00	36.50	24.1260	60.6260	13.6260	28.9915%
25	B	201WN	DAVE BURKE	MOONEY	1978 M20J 201	51.20	25.00	51.5220	76.5220	25.3220	49.4570%
26	B	7858P	WAYNE THETFORD	PIPER	1962 PA 24-250	45.01	35.70	51.2120	86.9120	41.9020	93.0949%



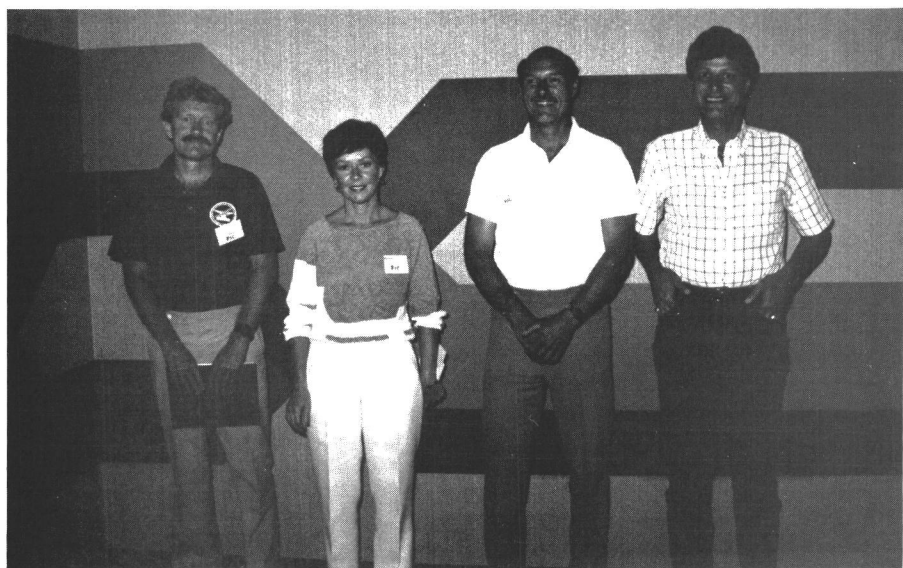
Class "A" Winners: 1st Ron Lewark; 2nd Tom Bein;
3rd Bill Figgie; and 4th Bill Cheavront.



Class "B" Winners: 1st Wayne Thetford; 2nd Alan Kested;
3rd Dave Burke; and 4th Chet Jewell.



Class "C" Winners: 2st Tom Daly; 2nd Tom Koehler; 3rd Jim Noffsinger; and 4th Ken Peterson.



Fuel Estimate Winners: 1st Jim Rowe; 2nd Vanita Gallo; 3rd Larry Merkowitz; and 4th Bill Figgie.

ADDITIONAL JACKPOT WINNERS

Several Denver-to-Jackpot Air Classic participants became winners during the drawing for door prizes at the Awards Party at which the race category winners were announced.

Each of the following was the winner of a ten dollar bill donated by CACTUS PETE'S: Vern Bradshaw, Ron Lewark, Chris Klein, Terry Barbo, Doyle Stauffer, Bonnie Noffsinger, Terry Thornton, Tom Lawson, Lisa Thetford, Joyce Lyle, Sue Burke, Karen Schnuerle, Rusty Browning, Donna Rundell, Laura Embrson, Kay Foster, Carlyn Goetz, Flo Porter, Nancy Jewell and Chuck Goetz.

Wine donated by DODD INSURANCE AGENCY was won by: Carolyn Goetz, Bill Totten, Nancy Jewell, Jane Stauffer, Dennis Mewshaw, Jack Quella, Vicki Warrender, Jim Rowe and Verne Dingman.

Carry-on Luggage donated by SAMSONITE was won by Wayne Thetford.

Two special prizes, courtesy of CACTUS PETE'S, were won by Vanita Gallo and Gretchen Jahn.

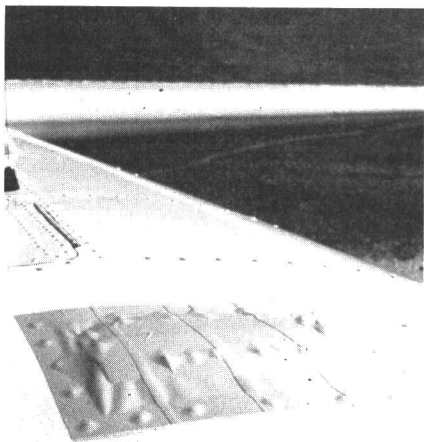
The lucky winner of the Caribbean Windjammer Cruise for Two, donated by SKYWAY PUBLICATIONS, was David Garel of Castle Rock.



Tom Daly had a problem when the nosegear of his Turbo RG wouldn't extend at Jackpot.



David Garel of Castle Rock, CO won the special prize of a Caribbean Windjammer Cruise for Two.



Some racers would do anything to gain an extra knot. Looks like a taped vent on a Mooney 201Wh.

HEARD ALONG THE FLIGHTLINE

For those who may have been curious, this year's 10th ANNUAL DENVER-JACKPOT AIR RACE was termed an "Air Classic" as a concession to casino owners over potential liability implications if termed a race. Participants probably didn't notice the difference.

*

Not many winning strategies revealed this year but we did hear: TOM DALY describe the importance of retracting landing gear as quickly as possible on takeoff to permit a higher speed through the departure checkpoint; JOHN WARRENDER (who flew co-pilot to AL KESTED) explain the high pitched sound coming from their record-setting Beech 35 when it passed over RKS was due to a stuck prop in high RPM; LEE PORTER describe an altitude over Red Feather Lakes low enough to read labels on beer cans; and BOB SUMNER (over 8 hrs. from Denver to Jackpot in a Mooney Mite) describe how one can make much

better time with fuel capacity such that "intermediate stops" weren't necessary.

*

WAYNE THETFORD (winner of Class B for the 2nd year in a row) got 89.5% of the rated 190 mph out of his Comanche 250 ... the highest handicap speed of all classes. Last year we chided Wayne about power settings and fuel burn. We didn't think anyone would break his 86.0 gal. fuel burn record from Denver to Jackpot. But he broke his own record this year with a fuel burn of 86.9 gal. Tells you something about his power settings.

*

BILL O'BRIEN was recognized as the only race participant to all 10 Denver-Jackpot air races.

*

LARRY MERKOWITZ flew a relaxed race in a Beech 35 to get acq-

uainted with the course. He has accumulated 500 hrs. of flight time since he started flying last year ... an envious record in itself. Expect to see a lot more of Larry.

*

MONTY MONTAGUE (race official for fuel consumption at RKS) brought a "secret strategy" for winning at Keno. He confided it was shared by a close female friend who used to work the Keno tables in Las Vegas. The strategy: numbers 13-16-19-26-46-49. He also suggested a secret strategy for the craps table. We still don't have a report as to whether the strategy worked.

*

CHERYL KRIEGER and DON RIOS of DENFSS provided the weather briefing and flight plan filing for the Denver-Jackpot Air Classic on the morning of July 12 at Front Range Airport.

*

Turning to non-race items, JIM and HELEN DYKES tell us the long awaited restaurant at MEADOWLAKE AIRPORT is now open. It's called GIOVANNI'S HANGAR RESTAURANT. Hours are generally from 7:00 a.m. to 9:00 p.m. (3:00 p.m. closing on Monday). Prices appear moderate.

*

Jeffco Airport Manager DAVE GORDON is frustrating over how to keep storm drainage out of recently erected Port-a-Port T-hangars. Dave also advises availability of 10 grass tie-downs at \$30.00/month and that TURBO

WEST will become the newest fuel vendor at the airport. Many will agree that Jeffco fuel sales could stand some additional competition.

*

DICK MANSFIELD tells us that TURBO AIR SERVICES has opened as a full service FBO at Boulder Municipal Airport. Manager Walt Smith has announced 100LL at \$1.50/gal and Jet-A at \$1.40/gal. Dick also expresses the thanks of Boulder's SARAHA FLYING CLUB to Calhan Pilots, FBO, and staff of Glaser Aviation for helping make a success of their camp-in flight training clinic.

*

BILL SCHOLL'S RANGER FLYING CLUB recently moved into one of the large hangar units at Front Range Airport. The larger space provides for offices and a shop with a capacity for 3 or 4 planes.

*

WINGS OF DENVER FLYING CLUB at Air Center One at Centennial Airport has a unique pilot supply shop recently opened. A special feature is the tandem main gear from a jet transport supporting the ceiling which is the fuselage belly and center section area. GREGG STOBACH says come on in and kick the tires ... real ones that is.

*

CPAer WAYNE LINDHOLM advises that Quality Kustom Seat Covers of Colorado Springs does high quality aircraft seat covers at reasonable prices. Their phone number is (303) 473-3799.





THE BOOKSHELF

by Stephen Blucher

AERODYNAMICS!!! The word brings fear to the hearts of many an aviator or flying buff. Why is that? It seems that while most pilots have a basic idea of why they are able to "slip the surley bonds," many really are not interested. If the engine runs and they can spend some quality time "boring holes," they are happy. "Leave that other stuff to the engineers."

Now there is a new book from TAB Publishing (No. 2390). Called the ILLUSTRATED GUIDE TO AERODYNAMICS, Hubert "Skip" Smith set out to write a book to remove some of the mystery about aerodynamics and this is it.

Lift, thrust, drag...it is all here. There are some formulas that appear to be engineer friendly only, but as you get into the text, everything is explained. Smith has made his book as easy as possible for the pilot, homebuilder and designer to relate to...to understand.

Knowing what your aircraft and

the air around it are doing will make you a better pilot. You can add to your proficiency and safety. Recently I read an accident report where a pilot added a twenty degree dihedral to his wings pulling out of an emergency induced dive. While not wonderful, the little plane did fly on to an almost standard landing. Why did the aircraft not fall out of the sky? The ILLUSTRATED GUIDE TO AERODYNAMICS will give you the reason. A combination of aerodynamics and pilot skill brought that flight to a safe conclusion.

Effective aspect ratios, powerplants, design phases...they are all covered in this book. Did you know the Wright Brothers had a wind tunnel?

This selection is available from TAB BOOKS, Blue Ridge Summit, PA 17214 and at the AVIATORS MART, Galley and Powers, Colorado Springs.

Specialists in Pilots Vision Drs. DeHaan, Gwin & Alderete

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NICKED-KNOCKED PROPS

Ten inches of the propeller tip separated during flight which resulted in a cracked engine mount and other vibration damage to the engine accessories. Probable cause - a previous rock nick in the propeller. This recent incident prompted the article below.

"The metal propeller appears to be one of the most durable parts of the modern light aircraft; and indeed it is, when properly maintained. But as an instrument of thrust, it has more pressure exerted against it than any other part of the aircraft. The blades are designed and constructed in such a manner as to withstand maximum power loading, but when the shape of the blade is marred or disturbed, its inherent strength can be reduced to a point where blade failure in flight is possible. Such failure can take place entirely without warning."

Most pilots find it hard to believe that a small cut or nick in a sturdy metal propeller can lead to a broken prop. To understand how this is possible, it helps to know something about the stress and force to which a propeller in action is subjected.

The most obvious force is centrifugal - the rotating action which exerts an outward pull on the blades. If you imagine an enormous giant trying to draw your arm out of your socket, exerting a force of 7,500 times the weight of your arm, you can appreciate the strain on the blade.

The revolving blade is also subject to a centrifugal twisting force, which may be visualized as the effect of a gigantic hand attempting to flatten the blade, exerting a force as high as 20,000 pounds per square inch. Again, the thrust exerted by the propeller results in a forward pull of the blades. Straining the engine to pull the plane out

of a mudhole can result in an out-of-track prop. These two kinds of stress produce lines of force running across the face of the blade.

But the kind of stress which is believed responsible for most blade failures, in conjunction with surface damage in piston-driven aircraft, is the vibratory stress set up by the engine forces conveyed to the propeller by the crankshaft to which it is bolted. This produces oscillating forces within the blade which change patterns as the engine r.p.m. changes. The location on the surface of the blade where maximum bending occurs are called nodes; at these locations the greatest amount of stress occurs. Even slight damage at these points can seriously weaken the propeller.

Any mechanical damage to the prop creates an opportunity for blade failure. Nicks, cuts, or corrosion pits can set up stress points by interrupting lines of force. Certificated mechanics are trained to round out depressions in the blade in such a manner as to minimize the concentration force at a given point.

The ordinary preflight inspection tends to scan the propeller. The pilot may do nothing more than run his eye down the leading edge of the blade and, if nothing catches his attention, move on. What he should do, realizing the consequences of an in-flight propeller failure, is to scrutinize and feel - with clean, dry hands - the entire surface of the blade. Nicks or cuts that escape the eye are often easily perceptible to the fingers. Inspection is easier and more accurate if the blade is kept clean. This is facilitated by occasional waxing with a paste wax, which helps prevent corrosion. Decals on a prop,

incidentally, have been known to permit the accumulation of hidden corrosion.

Note that the removal of small nicks or defects is not "preventive maintenance," which may be performed by the pilot or owner, but is defined in FAR Part 43 as "minor repairs," and "requires the service of a qualified mechanic."

"One little nick could knock you out of the sky."

Reproduced from FAA
General Aviation Airworthiness
Alerts, June 1986.

WELCOME NEW MEMBERS

Tanya D. and Daniel Smith,
Englewood
Mike Fergione, Grand Junction
Mike Sevall, Longmont

RE M I N D E R SARATOGA FLY-IN LABOR DAY WEEKEND

Have you called the Saratago Inn at (307) 326-5261 to make your reservations?

If you are planning to join your fellow fun-seeking CPAers, please be sure to let FRANK or VANITA GALLO (337-5864) know; also call TERRY BARBO (367-0670) if you are going to be participating in the golf tournament.



CPA FLY-IN TO WRAY AIR SHOW
CPAers attending the airshow at Wray, CO on July 5.
Left to right: Vern Foster, Bill Totten, Terry Barbo,
Kay Foster, and Beverly Totten.

COLORADO AVIATION CALENDAR

AUGUST 23-24 (Saturday-Sunday)
DENSITY ALTITUDE AND WINGS SAFETY CLINIC, Gunnison Municipal Airport. Co-sponsored by Colorado Pilots Association and FAA Flight Standards District Office. Participants receive 3 hours of dual (participant's aircraft) and qualify for FAA Wings Program. Moderate fee for flight portion of program to offset flight instructor costs. Info: Vern Foster 751-9421 or Rocky Warren 641-2176 (H) or 641-2966 (O), or Mick Wilson 466-7326.

AUGUST 30-31 (Saturday-Sunday)
CPA FLY-IN TO SARATOGA, WYOMING. Easily accessible to West Slope and East Slope flyers. Fun weekend of golf, tennis, swimming, rafting, fishing and other social activities. Info: Frank and Vanita Gallo 337-5864.

AUG. 31-SEPT. 1 (Sunday-Monday)
COLORADO SPRINGS 9th ANNUAL BALLOON CLASSIC. Three-day event over Labor Day weekend. 85 hot air balloons, parachuting, ultralights, model aircraft. Proceeds to local charities. Info: Dewey Reinhard 473-2120.

SEPT. 8-14 (Monday-Sunday)
HANG GLIDING FESTIVAL, Telluride. Info: Barbara Loken 728-3041.

SEPT. 12-14 (Friday-Sunday)
MILE HIGH AIR DERBY, sponsored by Colorado 99s. Race open to all interested pilots. Departing Front Range Airport. Cash prizes and trophies. Info: Phyllis Kramer 237-1056.

SEPT. 13-14 (Saturday-Sunday)
GRAND JUNCTION AIR SHOW, featuring Blue Angels. Info: Frank Miller 244-9120.

SEPT. 13-14 (Saturday-Sunday)
ROCKY MOUNTAIN AIR SHOW, Fort Collins-Loveland Airport. Featuring Canadian Snowbirds, Blackhawk Aerobatics Team, Earl and Paula

Cherry, Bobby Bishop, noise static displays. Info: Jim Bauer, Air Show Director, 364-1316.

SEPT. 13-14 (Saturday-Sunday)
CASTLE ROCK BALLOON FESTIVAL. Info: Joyce Bungaard 759-3907.

SEPT. 26-28 (Friday-Sunday)
CPA FLY-IN TO AMIGO INTERNATIONAL AIR SHOW, El Paso, Texas. Combined with U.S. Pilots Assn. Fall Board of Directors meeting. Info: Vern Foster 751-9421 or Walt Barbo 367-0670.

SEPT. 27 (Saturday)
PRIDE IN AURORA DAYS, Front Range Airport. Mass Hot Air Balloon launch, trade fair and art exhibit; a family fun day. Info: Joan Jacobs 695-7220.

OCT. 18 (Saturday)
TREASURE HUNT, sponsored by Pikes Peak Chapter of 99s. Activities begin and end at Meadowlake Airport. Info: Joanne Wormsbacher 598-5889.

OCT. 23-25 (Thursday-Saturday)
COLORADO PILOTS ASSOCIATION ANNUAL MEETING, combined with meeting of Colorado Airport Operators Association. Particulars to be announced.

OCT. 29-NOV. 1 (Wednesday-Saturday)
31st ANNUAL AOPA CONVENTION, San Antonio, TX. Also, UNITED STATES PILOTS ASSOCIATION GENERAL MEETING. Info: Walt Barbo 367-0670.

NOV. 1 (Saturday)
COLORADO PILOTS ASSOCIATION Fly-In to Leadville. Info: Vern Foster 751-9421.

DEC. 12 (Friday)
COLORADO PILOTS ASSOCIATION Christmas Dinner Meeting. Details later.

The following was written by Tommy Tyler, a fifth grader in Jefferson School, Beaufort, South Carolina. It was published in the South Carolina Aviation News and submitted for reproduction in FLIGHT LINES by Dennis Mewshaw.



WHY I WANT TO BE A PILOT

"When I grow up I want to be a pilot because it's a fun job and easy to do. That's why there are so many pilots flying around these days. Pilots don't need much school; they just have to learn to read numbers so they can read their instruments. I guess they should be able to read a road map too, so they can find their way if they get lost. Pilots should be brave so they won't get scared if it's foggy and they can't see, or if a wing or a motor falls off. They should stay calm so they'll know what to do. Pilots have to have

good eyes to see through the clouds, and they can't be afraid of thunder or lightening because they are so much closer to them than we are. The salary pilots make is another thing I like. They make more money than they know what to do with. This is because most people think that plane flying is dangerous, except pilots don't because they know how easy it is. I hope I don't get air-sick, because I get car-sick and if I get air-sick I couldn't be a pilot and then I would have to go to work."



AREA REPRESENTATIVES

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WRAY Lucile Bledsoe
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BURLINGTON Larry Mack
(O) 346-5352

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

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LONGMONT Lester von Hagel
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COLORADO SPRINGS Steve Blucher
(H) 597-5683

Pat James (O) 574-1602

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

PAGOSA SPRINGS Larry Bartlett
(H) 731-2489

DURANGO Delvin Gregg
247-4632

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CPA

