



FLYERS ASSOCIATION NEWS

Number 91-3

December, 1991



SUNSET AT CENTENNIAL

Our 1991 fly-in at Denver hosted by the Bacon's and Kooi's was outstanding, enjoyed by all. Their efforts were greatly appreciated by everyone. Members brought 35 Dukes, a King Air and a Conquest.

Pilots with Dukes at Centennial were:

Joe Aday	P-312	Ross Lewis	P-380
Dick Angel	P-292	Bill Lovell	P-340
Dick Bacon	P-127	Ed Malone	P-519
Ritt Berry	P-511	Dr. William Maxwell	P-584
Charles Byrd	P-570	David McCredie	P-309
Ed Chirgwin	P-579	Stan McNabb	P-595
Tom Clark	P-320	L. B. Moskoff	P-420
Ralph Cohen	P-412	Earle Olson	P-352
Richard Davis	P-212	Bill Passey	P-594
John Doyle	P-567	Robert Power	P-463
Raymond Frankenberg	P-173	James Rhude	P-443
Marc Franklin	P-465	James Russell, M.D.	P-577

Ed Garesche	P-263	Dane Scag	P-524
Jim & Marge Gorman	P-596	Lawrence Schuler	P-234
Mike Greenblatt	P-590	Don Thompson	P-249
Marcia Greenham	P-559	Marion Wasson	P-557
Bruce James	P-437	Glen Wright	P-582
Glenn Kooi	P-401	Ellett Lawrence - King Air N6672N	
		Kent Kelley - Conquest	

and without airplanes:

Thomas Clements		Bill Rabb	P-101
Ron Knudsen	P-393	George Furnald	P-435
Al Lewis		Jay Simon	P-261

Friday night a buffet was held at our host FBO with the Rockies in the background.

Saturday morning a fly-out was held followed by the maintenance seminar. Serving as moderators were:

Ralph Cohen, Duke Flyers VP, Dentist, A+P
 Paul McBride, Textron Lycoming
 J. D. Crandall, Beech Aircraft
 Tom Clements, Flight Review

As usual we all learned something new and helpful about our airplanes.

One discussion covered "vortex generators" for performance improvement. Please review the enclosed information and contact Phillip Kautt if interested. We need 15 owners willing to advance \$1000 each to get the program under way. \$3450 is inexpensive insurance for all of us. If an increase in T/O gross weight of even 150 lbs. occurs as it has on the Cessna's, it would be frosting on the cake.

Saturday night we were guests of the Bacon's and Kooi's at their hangar for great food and conservation.

During the business meeting all officers; Bill Pasey, President; Ralph Cohen, VP and Marge Gorman, Secretary/Treasurer were reelected for one more year. Marge reported ample money (\$5200.00) in the bank so there is no need for another dues payment. Your initial \$25.00 has gone a long way.

Sunday - members flew to Aspen for lunch at the Jerome Hotel - a fitting climax to a wonderful weekend - thanks to the Bacon's and Kooi's.

1992 fly-in will be held in Corpus Christi, Texas, November 13 - 15. Our host will be Bruce James. He says early November is a great time weather-wise in Corpus. The FBO will be Hedrick Beechcraft headed by John Cravell. Mark your calendars.

WELCOME NEW MEMBERS

- #255 Gregory L. Burtner
P.O. Box 1462
Germantown, MD 20875
301/972-9178 (O)
- #256 Renald R. Berggren - N4128D - P-58
2460 W. 26th Ave., Suite 180C
Denver, CO 80211
303/455-6112 (O)
303/776-8235 (H)
- #257 Steven Hodosh
243 Elmwood Ave.
Providence, RI 02907
401/781-3591 (O)
401/247-2532 (H)
- #258 Edward M. Malone - N-6749S - P-519
101 Loma Dr.
Knoxville, TN 37922
615-588-1661 (O)
615-966-8589 (H)
- #259 Tom Clark - N-6020S - P-320
P. O. Box Z
Aspen, CO 81612
303/925-8046 (O)
303-927-3649 (H)
- #260 Steven E. Preston - N-6693A - P-527
Tennessee Turbine - N-4762M - P-462
P. O. Box 607
Alcoa, TN 37701
615/970-9882 (O)
- #261 Terry Ehrhardt - N-33WF - P-168
118 Walla Walla Airport
Walla Walla, WA 99362
509/522-2626 (O)
509/938-5216 (H)
- #262 Dan Luckow - N-264D - P-451
7760 Gloria Ave.
Van Nuys, CA 91406
818/785-4256 (O)
818/344-4568 (H)
- #263 Bob Trinkle - N-6738Z - P-532
34 Dublin Lane
Cherry Hill, NJ 08003
609/795-4200 (O)
609/795-6037 (H)
- #264 Mike McKenna - N-696JV - P-543
McKenna Hawaii Ltd.
725 Kailua Rd.
Kailua, HI 96734
808/262-6576 (O)
- #265 Roger Stenbock - N-243RC - P-273
P. O. Box 430
Rocklin, CA 95677
916/624-5678 (O)
- #266 Lawrence L. McCants
P. O. Box 570
Goodland, KS 67735
913/899-5611
- #267 Michael H. Denyer - N-42AD - P-283
1229 E. Rockwood Dr.
Cincinnati, OH 45208
606/341-0088 (O)
513/533-9720 (H)
- #268 Raymond W. Randolph
P. O. Box 51823
Lafayette, LA 70505
318/984-3922 (H)
- #269 Dennis M. Way
Rt. 1, Box 15
Shallowater, TX 79363
806/745-3409 (O)
806/873-3401 (H)
- #270 Michael B. Evernham II - N-52NG
P-143
604 E. Main St.
Logansport, IN 46947
219/232-0117 (O)
219-732-0323 (H)
- #271 Jeremy Bauer - N-3808Y - P-562
2808 September Drive
Sumter, SC 29154
803/773-1400 (O)
803/481-7505 (H)

CHANGES TO 1991 MAILING LIST

Phil Kautt - add Suite 1190

William Faley - change address to 5555 Shorehaven Circle

Earl Fiscalini - change address to P.O.Box 4274, zip to 93912

Michael L. Stockhill - change address to 32815 42nd Ave., S.W., Auburn, WA 98023-2624

Milford Inganamort - change address to 1203 Dockside Pl., Sarasota, FL 34242-8762

Dennis Serras, delete P-519, N-6749S

Charles J. Malaquias - spells his name with "q" not "g"

Harold Kant - change address to 300 Davis Lane, Reno, NV 89511

Albert C. Sykes - change address to 12900 Frederick St., Suite D, Moreno Valley, CA

92553

Charles Masters - change address to P.O. Box 1749, Morgan Hill, CA 95038

John Doyle - change "N" number to N-51SP

change zip code to 94028

William T. Wood - delete P-534, N1M

Bill Graves - delete P-527, N-6693A

Darrell Williams - delete P-168, N-33WF

Robert J. Welsh - delete P-562, N-3808Y

For Sale: Sun-Foil Sunscreen - used twice

List price \$230. Price \$150.

Contact Bruce James 512/889-8516

AERODYNAMIC VORTEX GENERATOR SYSTEMS FOR IMPROVEMENT
OF DUKE LOW SPEED PERFORMANCE AND HANDLING

The installation of a wing and vertical tail vortex generator ("v.g.") system on the Duke was looked into over the past several months.

The purpose of such a system is to improve aircraft low speed-handling characteristics and performance.

The following benefits have accrued from the installation of 500+ such system kits on other aircraft—primarily Barons and 300-/400- class Cessna twins:

1. Reduction of V_{mc} by 6-14 knots. In certain (recent specific cases, V_{mc} has been ELIMINATED, e.g., V_{mc} has been reduced to below stall.
2. Attendant with this is the elimination/negation of all the nasty problems associated with single-engine accelerated stalls, etc.
3. Reduction of stall speed by 5-10 knots.
4. Reduction of takeoff (T/O) and landing roll, generally in the order of 25% to 35%. Accompanying this is a corresponding reduction in balanced field length.
5. In some cases, an increase in max T/O Gross Weight (MTOGW), in the order of 150 to 400 pounds.
6. No addition to aircraft (A/C) weight (the mod kits weigh less, I believe, than one pound).
7. Negligible (approximately 1-2 knots) penalty at the high-speed end of the envelope.

In summary, these systems could be described as STOL kits that eliminate the hairy, low-speed, bad habits of light twins - all upside with no downside - at a cost in the range of \$3,000 - \$4,000.

There may also be several other benefits, such as some increase in single-engine rate-of-climb (ROC), etc.

However, there's one minor drawback to doing the latter; no STC exists for installing such systems on the Duke.

Of the two companies that dominate the light-twin v.g. system world, it's felt that the following firm offers the best arrangement for DFA members:

Micro AeroDynamics, Inc.
400 Airport Road
Suite D
Anacortes, WA 98221

Phone(s): 800/677-2370
206/293-8082
Fax: 206/293-5499

Charles White and Bob Desroche (an engineering test pilot who spent 12 years with Jim Robertson of Robertson STOL kit fame) are the principles at Micro AeroDynamics, Inc. (MADI).

V/G Systems, Inc. (V/GSI - formerly Friday International) had primarily/exclusively - up to the time of the departure of Messrs. White and Desroche - concentrated on v.g. systems for Beech Barons. MADI, when it was formed, somewhat logically looked to another, as-of-yet unexplored, market segment - Cessna light twin (300 and 400 series) aircraft.

There is now cross-over with regard to manufacturers to which these two companies are applying their skills.

Contact was made with both companies with regard to getting their respective v.g. systems STC/d for the Duke. Both appeared willing to do so, but with certain differences. Summarized below are relevant "facts" regarding both companies' v.g. system characteristics and their "go forward" T's & C's (terms and conditions). Please note that the accuracy and validity of the following information is disclaimed; it only represents a "best efforts, at-a-glance" attempt to focus on each companies' (potential) performance claims and T's & C's.

	<u>MADI</u>	<u>V/GSI</u>
Vmc	-10	-6
T/O & Lnd'g Roll	-25%	?
MTOGW Increase	0-400 Lbs. (1)	Unknown
Type STC	Full (2)	Various
System Weight	[1 Lb.	[1 Lb.
Vm/Vc Penalty	Vmax 1-3 Kts (3) Vcruise 0 Kts	Negligible
Cost	\$3,450	\$3,450 & Up (4)
Escrow Deposit Req'd	Yes-\$1,000 (5)	Yes-\$1,000 (5)
Minimum Duke Kit	15	50
Approximate Availability		2-3 Months After Go Ahead

- FOOTNOTES:
- (1) MTOGW increase(s) possible assuming analysis shows a/c structure capable of carrying additional weight.
 - (2) "Full" means STC with certified lower Vmc, Vstall, new airspeed indicator and POM new performance tables/charts. "Various" means everything from a minimal "no material effect on the a/c" STC up to "Full".

- (3) Per MADI, Vmax degradation may be due to possible improper a/c rigging.
- (4) V/GSI price of \$3,450 is for minimal STC, e.g., no new certified Vmc, Vstall, a/s indicator or performance charts/tables.
- (5) Escrow amounts would be deposited in interest bearing (6% for V/GSI) accounts in name of Duke owner(s). DFA should have legal counsel on this matter to insure funds are not held unduly long, not returned, etc.

In order to get MADI started on the Duke STC effort, there needs to be 11 more Duke owners - beyond the 4 who have already agreed - to commit to the purchase of a kit. DFA member owners should forward, as soon as possible, their interest to the under-named at the address or numbers below:

Philip C. Kautt	Phone (Office): 202/887-5570
MARSOC, Inc.	Fax (Office): 202/293-1172
P. O. Box	
Washington, DC	



BIRDS OF A FEATHER



ASPEN AIRPORT



SATURDAY NIGHT DINNER

