

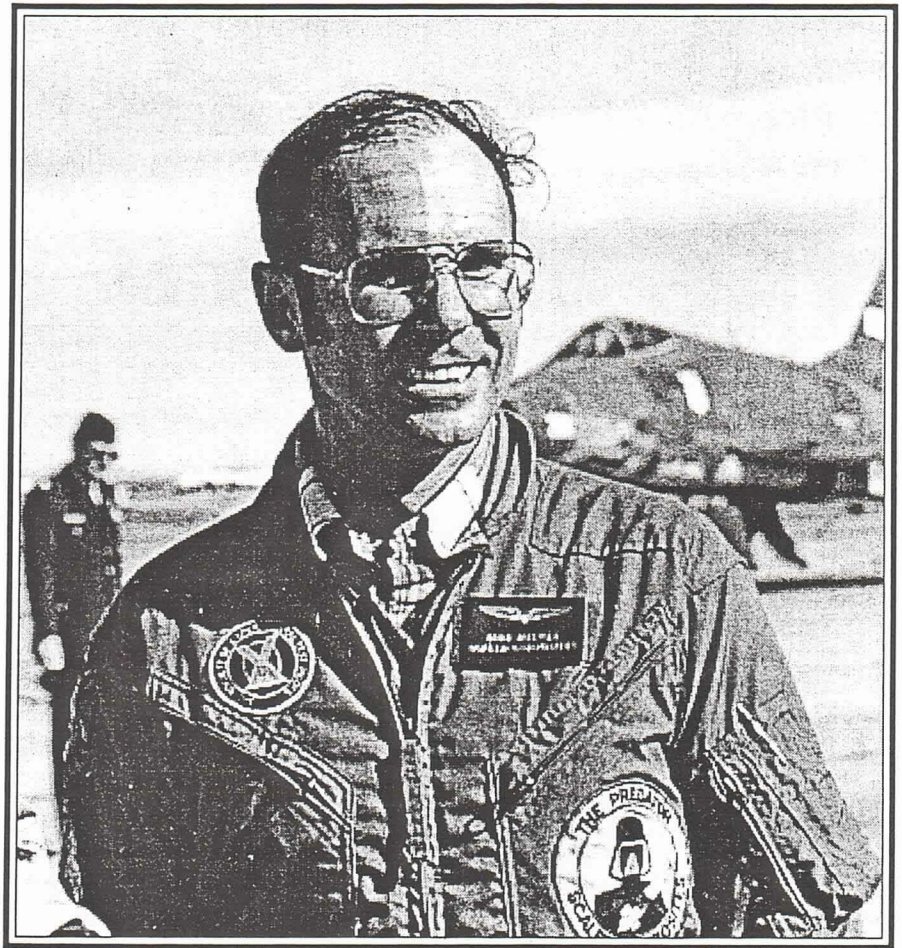
## EZ Man of the Millennium

*ED* - As an era ends, I reflect upon land mark events and people who created them. One of the biggest events for me has been involvement in canard related activity. None of it would have been possible without Burt's creative genius of course, but the person I give credit for most Long-EZ development is Mike Melvill.

Among thousands of others, I was in the crowd watching Dick Rutan land the Vari-Eze at OSH 75. I watched Dick set the World distance record that week and, later marveled at the number of Vari-Ezes that appeared at OSH. The Long-EZ was next introduced and appeared to be the airplane for me! I bought plans, studied them carefully and judiciously complete the "education section". I took my book end to OSH and hoped for an audience with Burt for his blessing. Such was not to be; Burt was much too in demand.

I was fortunate enough to find a man, at the RAF booth, who seemed very knowledgeable, appeared genuinely interested in my building an airplane, carefully examined my book end and flat plate samples, tactfully made suggestions, listened to my questions and concerns and finally announced I could build a good safe Long-EZ. Buoyed up with such genuine and positive assurance I launched into construction. When things didn't go as planned I thought of that man's quiet reassuring words and pressed on. When I couldn't figure out how to do something I learned the answer from that man. He was accessible and seemed genuinely interested.

Three years later I flew my Long-EZ, thanks in a big way to his encouragement. He went on to further flight test many EZ mods and freely share all experiences with others. He conducted the "bull sessions" at OSH wrote the Canard Pusher and was on the front line of communication with canard enthusiasts. If I didn't have my plans number handy but needed some technical assistance he gave it. He developed the "1145 MS rain canard", solution to the rain induced trim



Mike, recent winner of the highest honor a test pilot can receive. The Ivan C. Kincheloe Award, has been won by such luminaries as Neil Armstrong, Crippen & Young, etc. The trophy is kept at the National Air and Space museum in Washington DC.

problem. Continuous cooling problem investigation led to his development of the Berkut style arm pit cooling cowl for the Long-EZ. He developed a long range fuel system and flew it around the World. He has made most of the first flights at Scaled Composites. Most recently he was awarded the highest test pilot award, the SETP Kincheloe Award. The list could go on for paragraphs; the man is of course,

### **Mike Melvill.**

#### **Michael – A Born Adventurer**

*Sally Melvill (CA)* - Michael is a born adventurer and risk taker, (mostly educated risks!) He truly believes that

unless a person pushes their limits, they will not know themselves. He also thoroughly believes when someone wants something done, they should commit themselves and go for it. He believes if we commit ourselves, doors open, opportunities arise that we dared not think of. One must think about it certainly, but don't wait too long; at least give it a try. He has so enjoyed the homebuilt movement over the years. One of the many reasons is he personally has had such fun building and flying, he would like others to share that same feeling.

Mike was born and raised in Johannesburg, South Africa. He was the gymnastics captain for his high school. After completing school, he went by boat from Durban, SA to Venice, Italy and crossed Europe on his motorcycle. I joined Mike in En-



gland, where we were married and raised our two boys. While living in England, Michael took up Sport Parachute jumping with the Territorial Army. I can vividly remember pushing a stroller and dragging a 3-year-old across a field in order to take pictures of the landing! Michael, an adventuring spirit? Certainly! With \$900 in our pockets, we immigrated to the United States in 1967 and lived near Indianapolis for the next 11 years.

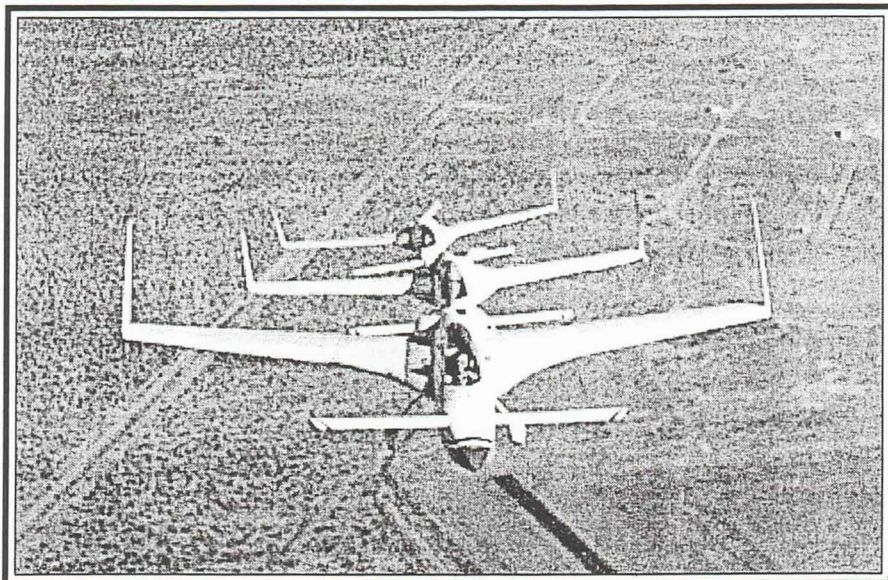
Mike was a partner in a small machine shop in Anderson, Indiana. The company (my two brothers and Mike) decided that they needed a pilot. My brothers immediately said "no way" and told Michael to get his license! This he did in Anderson, Indiana. It took a while for Mike's instructor to stop slowing down the Cessa150 to open the door so that Mike could do you know what!

As he started flying for the company, he was hooked. He bought the plans for a Nesmith Cougar and we proceeded to build. Of course all the while he was reading the magazines and found a Cougar for sale in Las Vegas. With one and half hours in a tail dragger, off he went to bring it home. Besides a broken tail wheel in Winslow, AZ, he was home in a week. That was the start of homebuilts. After going to Oshkosh a few times and meeting Burt, we bought the Viggen plans.

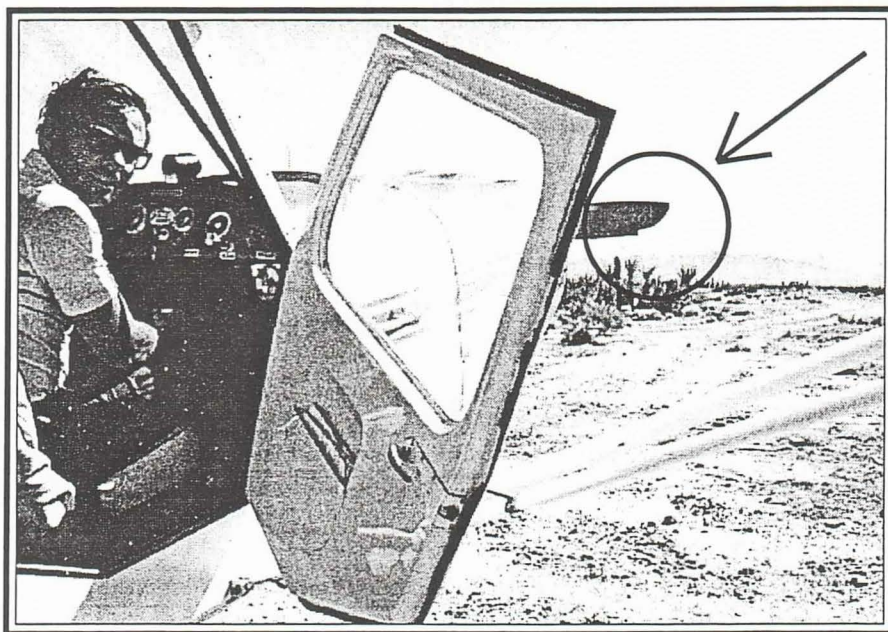
At that time we had just moved into a new home with a family room which was 30' x 16'. Yeah, two small boys and tons of room. Oh silly me. On Christmas day 1974, the carpet rolled up and down went the jig for the Viggen. At least I knew where he was! The Viggen flew in September 1977. While on a company trip in the Viggen, we flew by Mojave. Well twenty-one years later, we are still here.

Michael has always excelled at everything that he put his hand to. While in Indiana, we practiced Falconry. He won Falconry meets and would in this time be considered a Master Falconer. The Air Force Academy in Boulder Colorado uses Gyr Falcons as their mascots. Occasionally these

Michael learned formation flying from buddy Dick Rutan very early and still loves it.



7 EZ the VW powered EZ  
4EZ the Vari-Eze prototype  
79RA the Long-EZ prototype



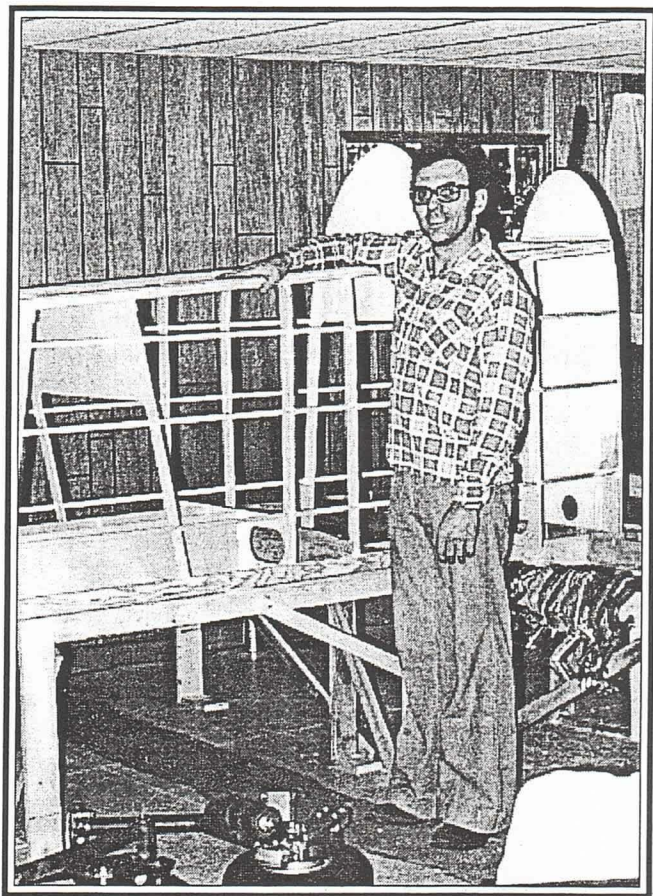
When your Champ breaks its prop in flight, you land in the desert, carve both ends to match and take off.

captive falcons break a feather and need a skilled repair that is quite an art. The Air Force brought their Gyr to Michael for wing and tail feather repairs. He also started making the bells and swivels that are used by the falconers for their birds. We were filling orders from as far away as India. With his love of using his hands and machines, he was able to truly create things of beauty and still does.

He got into kayaking. Every weekend, we took off from Indiana to West Virginia where the class five rapids were (the big ones!) He paddled for two days with me either kayaking or rafting and charged back in time for work on Monday morning. He has kayaked the Grand Canyon. There is never enough excitement!

During the test flying he has done, a few instants stand out in my mind.

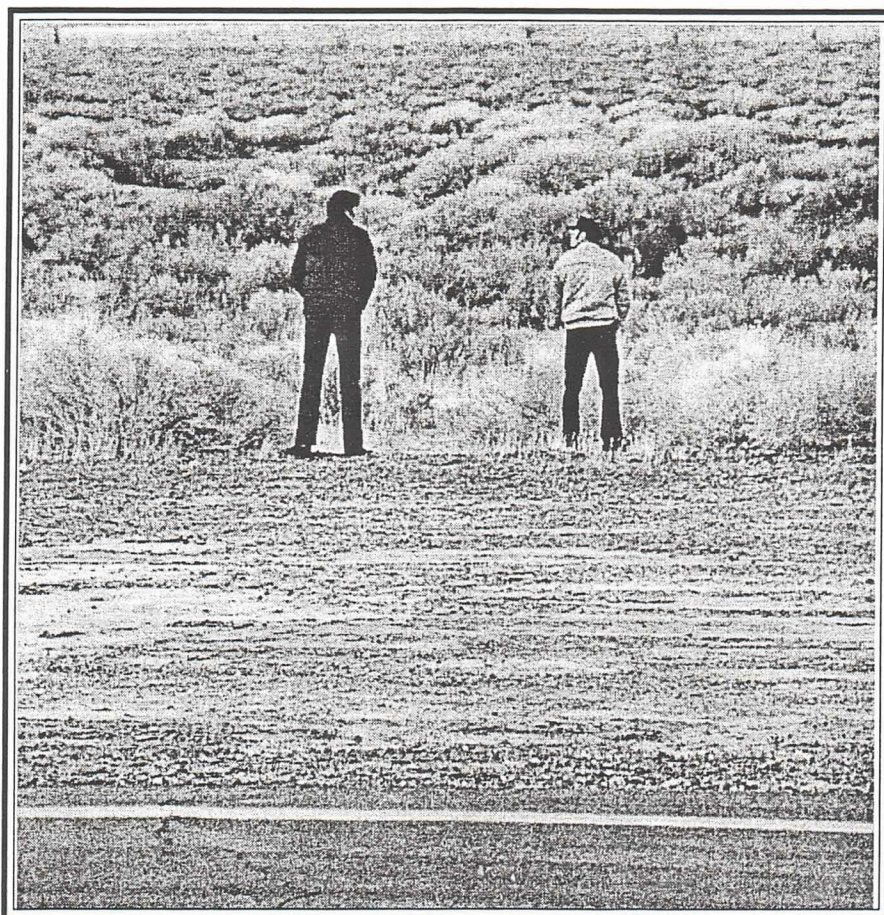




A happy homebuilder in his bell-bottoms  
and our family room



Falconry as a lad with lots of hair!!!!



A NEVER before published  
photo! Five minutes prior to  
take off of the Voyager, the  
final technical discussion  
between Burt and Mike.  
Edwards's runway in the  
foreground. HONEST!!!!

While test flying the Mercury, a copy  
of the Microlight, the test card asked  
for the spin capability of the airplane.  
As always, a test flight is thoroughly  
discussed including the time to depart  
the airplane should things go wrong.  
This was to be 8000 feet. Michael  
put the airplane into the spin, which  
evolved into a flat spin. Past 8,000  
feet and Michael was still determined  
that he could get it out. After 17 ½  
turns and WELL below 8,000 feet, he  
did. Never give up. On one airplane,  
at 300 plus knots, the elevators flut-  
tered. He flew the Proteus to 51,000  
feet and prepared to go higher. All  
this was done with a sense of "wow,  
what can we do next?"



When Michael decided to fly to South Africa in 1997, he worked for a year prior to leaving making sure that everything on that airplane was just perfect.

And it was, all that way and no glitches! Thank you! That was the journey that pushed Michael to discover some of his limits. But he is still looking for adventure, as though going to 60,000 feet is not enough. Although we have never sailed, he would someday like to sell everything, buy a yacht and sail around the world!!!!

What can I say? It started with losing the family room to a life of adventure and fun and continues with still more to come.

### **EZ Builders Think of Mike**

In the early Days, when Burt was sometimes too busy, Mike and Sally were always there when needed and also as good Friends.

Bill & Julie Lermer

There are a lot of significant teams in the history of America such as Lewis & Clark (Opened the West and Northwest) Watson & Crick (Discovered the significance of DNA) Jobs and Wozniak (Apple Computers) I often wonder what one would have accomplished without the other.

The same could be said about Burt Rutan and Mike Melvill. Where would Burt be and where would all of us be, had Mike decided not to go to work for Burt Rutan????? The few times that I called or wrote, Mike would make time for the questions and give me the pros and cons, even though he probably heard the same question over and over. Thanks for everything Mike.

Steve Rother

I never met Mike Melvill, but I think I am using all his ideas and developments. Roncz canard, O 320, etc. You are going to get a lot of emails on this one.

Steve Volovsek



Mike and Burt. First flight of the Boomerang.

Bob and I have not had a lot of interface with Mike — but when we were building our Long-EZ we had a signed/autographed picture of Mike and Burt flying formation in their Long Ezs together. It was hanging in the shop (and is still there) — Looking at that picture everyday sure helped to keep us going.

Mark Barker & Bob Lee

Mike Melvill has always had an open ear on topics I have approached him with when it came to the Defiant. Despite having gone on to bigger and better things, Mike never held back on his willingness to help builders of a 20 year old design. Thanks Mike!!  
John Steichen - Editor - Defiant Flyer Newsletter.

By co-incidence, Mike, Dick and I all started Longs the same day, Sat 6/14/80. We all had reg jobs and working part time, Mike/Sally flew in Dec 80, Dick flew mid 81, and working as hard as I knew how, I flew in Feb 82. I would like to hide and watch some day and see how Mike can work 4 times as fast as me. I have great respect for his building skills as well as flying skills.

Herb Sanders

Mike, by example and by providing solid answers to our questions, has helped hundreds of us achieve that unbelievable accomplishment of building and flying our own safe EZ, regardless of our skill level or vocation. He has continued to inspire us as he improves his EZ and demonstrates its almost unlimited potential. He and Sally are a credit to the family of homebuilt planes and their pilots.  
Charles Beard

To celebrate the purchase of my Long-EZ, I treated myself to the EAA Oshkosh airshow, whereupon I happened on Mike Melvill holding an "informal chat" on EZ street, next to Burt's Defiant and he patiently, clearly answered all questions, making himself and his expertise available to anyone building and/or operating an EZ - wow what a resource!.

Ann McMahon

Thanks for the advice, Mike. After my "Sucker Hole" going to Oshkosh in 1992, you reviewed the damage and gave practical advice. I have never forgotten your willingness to help, enabling me to return to Florida safely.  
Al Hodges

Mike is an inspiration for anyone in-



volved in building and flying an EZ. He has set very high standards for new ideas and concepts as well as proving these ideas and concepts by taking them around the world.  
Joe Berki

I wrote Mike last year asking about his 0-360 cowling and he responded with a two hand written pages describing his installation in detail with two excellent hand drawings. This, from a very busy man that did not know me from Adam.  
Jim Buchan

I met Mike the first trip to RAF and he is a wonder! But it's Sally that makes the man.... I helped her arrange about 3 Rutan birthday fly-ins and she is the dynamo that protects his back so he can go forward so fast and so right. A lot of people come to me with questions and I can usually find the answer to all but a hard fractional few that are just stumping. That's what I save to ask Mike. If Burt inspired the Canard Bible, then Mike wrote the Psalms - all of them. The CPs were so much his work and he loved the builders so much that he put out an absolutely honest answer to every question... And how could anyone persist with that ridiculous South African accent after so many years near Burt - or is it in spite of Burt?...  
Beagle (David Orr)

Among the Brothers Rutan, Mike ranks as 'Brother the Third'.  
Phil Chase

Mike will be remembered as the person helping Burt with all the week end demonstrations put on so we could build our EZE properly, always very kind and patient. Thank; you Mike.  
Wally and Paul Loewen

What else can you say but thanks!!!!!!  
Steve Drybread

While building my LEZ Mike was always very helpful and patient no matter how dumb my questions were. Having him as a customer contact no doubt played a big role in RAF's success in the Homebuilt business. Thanks for all your help.  
Ken Smith

Congratulations on receiving the prestigious Kincheloe Award. Many thanks for your unending patience on the other end of the line all those hundreds of times I called RAF when building my Long-EZ's, and your inspiration with your continuing efforts proving time and again the utility of the Rutan designs.  
Ken Miller

Mike is a great asset to us and to Burt. I am jealous of all the cool Rutan designs he got to fly!  
Ron Gowan

Back in 79 and 80, I would ride my motorcycle to Mojave every weekend to look at planes and learn. Mike's example was a strong factor in forming the belief that I could do it too. It was the birth of an airplane.  
Wes Lorier

My calls started immediately after the first lay-up (front seat bulkhead - I screwed it up slightly) and did not stop until I flew. Your willingness to listen and give no BS answers was amazing! Hey I still have questions.. when can I call?  
Dave Lind

I've known Mike for over 20 years, and I've never formally thanked him for the hundreds of patient phone calls answering hundreds of dumb questions. Last year, though, Mike helped me with N888EZ in a way that I'm certain that neither he or I ever imagined - Thanks for helping a friend in need!  
Dick Kreidel

How does one compress many years of help and friendship into two sentences? I built my longs 18 years ago and without Mike's support and help I doubt that it would have ever flown. Mike did the initial maiden test flight which he concluded with a victory roll over the runway. I knew then that the plane I built was A-OK. And let's not forget Sally. She flew chase that memorable day and gave me my first taste of what it felt like to fly in a Long-EZ. These are marvelous people who have both changed the course of our lives.

Ken and Joyce Clunis

Mike and Sally helped us repair a cracked prop in Mexico while we were all on vacation. A tremendously kind, helpful, patient, down to earth and genius of a man and woman.  
Jim Willer

It has always amazed me how Mike can answer just about any question concerning the EZ plans. More importantly, Mike never made me feel there is a dumb question. His personal attitude has greatly contributed to the safety of our aircraft.  
Alex Becker

Thank you for having the courage and the determination to do all that you have done and will do in the future. Keep up the great work, seen and unseen.  
Robert and Valerie Harris

I am relatively new to the EZ community and have never had the opportunity to meet Mike in person. However, his dedication to the Rutan design as indicated by his continued development, testing, refinement and around the world flight with Dick convinced me to buy the Cozy that I love to fly so much today. Congratulations and thanks Mike.  
Richard Reitz

---

### O-200 Oil Leaks

ED: - The local aircraft engine machine shop, I frequent, has determined the cause and simple fix for oil leaks that appear to come from O-200 cylinder bases.

Stock crankcase through bolts are .017" smaller than the hole through the case. The excess clearance allows oil to leak by and come out under the cylinder base. It appears to be a base seal leak but is not. The excess bolt to case clearance also allows the case surfaces to fret, a major cause for crankcase rework.

The fix is to install O-300 through bolts, part number 531211. You do not have to split the case but do have to pull a cylinder to install the bolts. The O-300 bolts have two "O" rings (7/16 x 1/16) and a snug fit in the case which effectively stops fretting and oil leaks.