

CANARD PUSHER

APRIL 1997

RUTAN AIRCRAFT FACTORY

VOL.12, ISSUE 2, NO. 88

THE SPIRIT OF EAA FRIENDSHIP WORLD TOUR

Update No. 4

MOJAVE, CA.- There was no O-Dark 30 takeoff on Friday, April 4th as planned. A few last minute delays turned into a few hours and it was noon before the two LongEZ's were ready to roll.

It was a take off and fly-by worth waiting for, however. Both EZ's heavy, although not fully loaded with fuel, needed more runway than usual before leaping into the air. After a quick go around, Mike and Dick did a formation fly by for a crowd of about 100. Then, with a tip of their wings, they began their world flight adventure.

Weather has not been cooperative at all. Friday, April 4th, the team chased a storm into Midland, Texas. There, they "put the birds in a hangar, enjoyed a hearty steak dinner at the Outback Restaurant and then fell into bed for a much needed rest," e-mailed Dick.

The team says the weather between Texas and Florida is not improving, so they decided to go only as far as Greenville, Mississippi and stay with good friends Jim and Margaret Hightower.

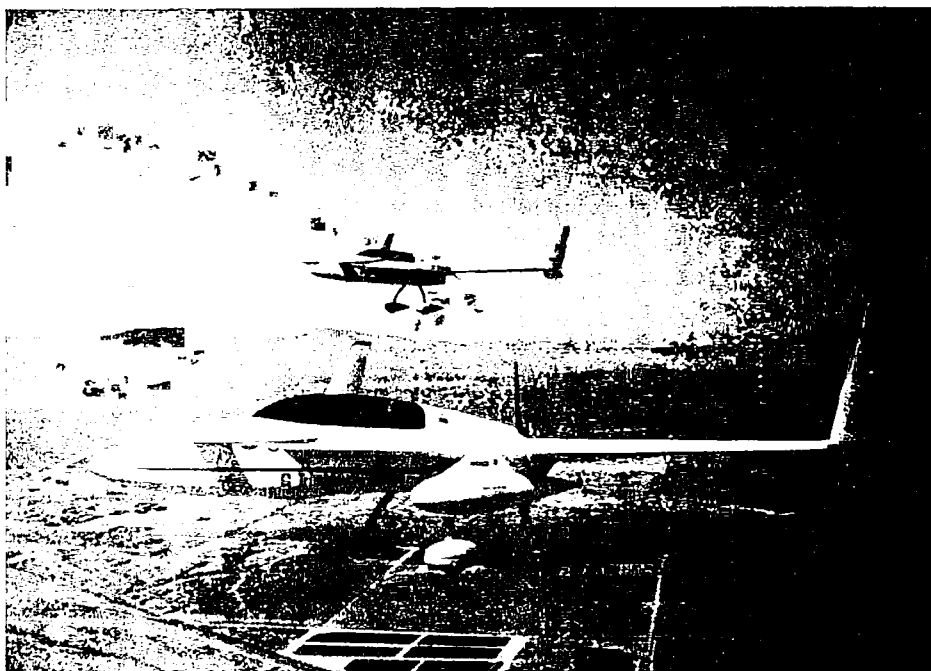
Next on the agenda is Lakeland, Florida and a visit to EAA's Sun N Fun.

UPDATE No. 5

"The reception from the Sun N Fun Organizers and Directors was incredible!" said Mike Melvill. The team radioed the Lakeland tower at about 1:00 pm, and after stalling a couple of the acts during the air show (the field is normally closed to all traffic during the shows), Mike and Dick were invited, "Come right in..." the tower called back. Dick commented, "They were very professional. I don't even think the people on the ground were aware, we weren't part of the show!" After a formation fly by and landing, Mike and Dick were greeted by many Sun N Fun friends, including A. Scott Crossfield, Bob Hoover, Paul Poberezny and many others.

The team was invited to a reception and a delicious dinner at the Sun N Fun President's tent and EAA friend John Burton made arrangements for accommodations and transportation; not a simple challenge during 'no vacancy' week at Sun N Fun.

After spending the afternoon with Sun N Fun convention



attendees, giving a few smiles to the TV cameras and a few good words to the radio and printed media, the team was ready to rest.

"We hit a major weather front," Dick said, "the rain pounded the airplanes and tore off some of my decals. But Mike, the flight leader, found a hole in the weather and we flew through," he added. And the rain proof leading edges on the props? "They've been mandatory," said Dick, "this weather has been

just a touch of what we'll hit flying through the tropics."

The fuel flow and performance of the LongEZ's is remarkably similar in spite of the different styles of fuel tanks installed on each airplane. Dick chose to mount his external wing tanks directly on his wings, and Mike's are mounted underneath of his wings. Both Mike and Dick are getting about 28 nautical miles per gallon at the moderate weight they are flying. Because there is plenty of fuel availability and the legs are short, they haven't fully loaded with fuel during these legs.

The Long-Ez way around the world

by Kelly Hall

see Long-EZ Way page 3

BRIEFS

Whoops — Some were surprised to learn that Perth was in New Zealand according to a story I wrote for CP 86. I must of consulted that *really antique* map in Burt's office for that tidbit — the one printed before the continents split. Not to worry, I went out and bought a more recent version of the world map.

On the Newsstand — *Air & Space Magazine's* two-part interview with Burt on their Web Site includes virtual reality pictures by Jim Sugar. www.airspacemag.com/ Burt talks about everything from building models as a kid to what inspires him as a designer and how he hires engineers at SCI. Read it, he urges, there's lots of surprises!

Burt told me today that the April issue of *Air Progress* has a nice article on the Boomerang.

For those across the ocean The German magazine *P.M. Magazine* published a brief about the Boomerang on page 26. Telefon (089) 41 52 0.

About my Hours at RAF — I am really there in the office more than you think. Licensed EZ builders (you know who you are) can leave a message on the answering machine. All others please write to us at 1654 Flightline, Mojave, CA 93501. Fax us at (805) 824-4174 or email raf@hughes.net.

Tonya

 **To report accidents and incidents**

Write: Rutan Aircraft Factory
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Mojave, Ca 93501
or Fax: (805) 824-4174

RAF HOURS: Rutan Aircraft is officially open every Tuesday. Please call between 10 am - 2 pm (805) 824-2645 and give your name, serial number and nature of the problem. If you are not in an emergency situation, we ask that you write to Mike.

Note — Sometimes you can catch Tonya at RAF Monday thru Friday. She is in and out. Try and try again.

When writing to RAF, send along a stamped, self addressed envelope, if you have builder's questions that need to be answered. Please put your name and address on the back of any photos you send.

The Canard Pusher
is published quarterly
(January, April, July, October)
by Rutan Aircraft Factory, Inc.
1654 Flightline, Mojave, CA 93501
Editor: Mike Melvill
Publisher: Tonya Rutan

U.S. & Canadian subscriptions
\$14; Back issues \$3.50
Overseas (Airmail) subscriptions
\$16; Back issues \$4

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VariViggen (1st Ed)

CP 1 to current

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CP 10 to current

VariEze (2nd Ed)

CP 16 to current

Long-EZ

CP 24 to current

Solitaire

CP 37 to current

Defiant

CP 41 to current

A current subscription of the *Canard Pusher* is mandatory for builders, as it is the only formal means to distribute mandatory changes.

Sally helped Mike pack for the 'round the world flight with love-n-care



Long-Ez Way

"The workload is incredibly high," Mike shared. With the Toshiba lap tops, FliteMap, INMARSAT and three global positioning systems a piece, these LongEZ's are better equipped than airliners. "It's about all you can do to fly the plane and work everything," Mike said, "it's exhausting. You have to be absolutely organized before take off -

everything you need must be within quick reach," he added. The more the team flies, the more comfortable they will become in using all of these high tech systems. "Right now, there's no time to be bored," Mike said, "there's hardly time to look out of the window."

What's next? A quick trip to Dr. Tom

Field's in Boca Raton, Florida for some minor maintenance on the planes and one last engine inspection. Then on to Granada and then to Belem, Brazil where they'll meet up with LongEZ owner Fabio Miguez and his father, Luiz.

UPDATE SIX

Another day, another mile...or two...or thousands behind them. Mike Melvill and Dick Rutan enjoyed a couple of relaxing days and had the opportunity to do some maintenance and minor repairs on the airplanes before their first long, grueling leg.

Dr. Tom Field, a LongEZ owner in Boca Raton, Florida, was host to the team and provided them a beautiful, spacious hangar that they had all to themselves. Dick changed his vacuum pump after discovering the vacuum pump drive was leaking, and also tackled an oil seal leak. The team also took the opportunity to sort out items in the airplanes, and got everything organized and re-packed.

While they were working on the airplanes, a midnight blue Rolls Royce pulled up, and an unnamed aviation enthusiast got out of the car. The guys tried to bum a ride to a nearby hotel, but the mysterious visitor wouldn't hear of it. "You can stay at my place," he insisted.

see Long-EZ Way page 4

WORLD FLIGHT ROUTE

DAY ONE - April 4th - Mojave, California to Midland, Texas
DAY TWO - April 5th - Midland, Texas to Greenville, Mississippi
DAY THREE - April 6th - Greenville, Mississippi to Lakeland, Florida
DAY FOUR - April 7th - Lakeland, Florida to Boca Raton, Florida
DAY FIVE - April 8th - Boca Raton, Florida
DAY SIX - April 9th - Boca Raton, Florida to Ft. Lauderdale Florida to St. George, Grenada
DAY SEVEN - April 10th - St. George, Grenada to Belem, Brazil
DAY EIGHT - April 11th - Belem, Brazil
DAY NINE - April 12th - Belem, Brazil to Sao Paulo, Brazil
DAY TEN - April 13th - Dos Campos, Brazil
DAY ELEVEN - April 14th - Dos Campos, Brazil
DAY TWELVE - April 15th - Dos Campos, Brazil to Sao Paulo, Brazil
DAY THIRTEEN - April 16th - Sao Paulo, Brazil to Recife, Brazil
DAY FOURTEEN - April 17th - Grounded in Recife, Brazil
DAY FIFTEEN - April 18th - Recife, Brazil to...
DAY SIXTEEN - April 19th - ...Abidjan, Africa
DAY SEVENTEEN - April 20th - Abidjan, Africa



A hug from Mom
Rutan is worth a
thousand words

Long-Ez Way

His place turned out to be the penthouse on the 17th floor on the beach. These two are really roughing it, huh?

Early this morning (April 9th) the team flew down to Ft. Lauderdale International so they could take off before the jets woke up. National Jet invited them to use their 9K' runway, a welcome invitation since this would be the first fully loaded flight of the tour. The team fueled to the max (thanks for the discount National Jet!) and set out for St. George, Grenada.

The flight took about ten hours. The EZ's flew over Nassau, Grand Turk, and San Martin Island before finally landing in St. George, Grenada. About an hour and a half before landing, Dick sent me an e-mail from the airplane. Since all e-mail and other communications are done via satellite, and there is a per keystroke charge, the message was cryptic and brief.

"Kelly- we r 1+30 out Grenada. Acft are exc. Wx is great. Islands beautiful. AOK. Hi 2 Kris. DR"

Wx is an abbreviation for weather. And Kris? She's Dick's fiancée.

Tomorrow morning (April 10th) they'll take off for an eight hour flight to Belem, Brazil. To avoid country overflight charges, the team will be flying at least twenty miles from the shore line.

UPDATE SEVEN

They made Belem, Brazil! Landing after an exhausting eight and a half hour leg, the team decided to stay put for a while.

E-mail I received from Mike while in flight about an hour and ten minutes from Belem read: "HI KELLY, WE ARE JUST STARTING ACROSS THE MOUTH OF THE AMAZON AND WE ARE 185 MILES FROM BELEM. 1:10 OUT. WE FLEW RIGHT BY THE FRENCH EQUIV. OF CAPE CANAVERAL, CAYENNE, PRETTY NEAT. GRENADA

WAS GREAT, WISH WE COULD HAVE SPENT MORE TIME. PLANES ARE RUNNING LIKE SWISS CLOCKS! EVERYONE HAS TREATED US JUST SUPER."

Dick's message to me was a little more brief: "FIELD IN SITE. LANDING IN 15 MIN. LOG OFF. BYE BYE. DR"

After customs and a ride to the hotel (the Belem Hilton, no less), they slept for hours. Dick said they slept until nearly lunch time today! Mike and Dick were rustled awake by some very unfamiliar sounds...heavy gunfire! E-mail from Mike said the gunfire might have been in celebration of Bastille Day and it didn't last long. But, it sure got them out of bed in a hurry!

Mike also said it's hot in Belem, and humid, too. The team landed in a rainstorm and thunderstorms had the airport closed as the two LongEZ's approached. Mike and Dick had to hang out a while until the thunderstorms passed and air traffic control re-opened the field so the guys could land. The rain didn't let up, and since they didn't have umbrellas with them, they had to make mad dashes between rain showers to get anywhere.

Dick commented very favorably on the agent Jeppesen arranged to meet them. Said no one in Belem speaks "fighter pilot," and he was having a little bit of trouble communicating with the natives...

Mike and Dick will depart Belem on Saturday morning and fly to Dos Campos, Brazil, where they will stay with Fabio and Luiz Miguez. Fabio built a LongEZ and has hangar space and tools ready so the team can thoroughly check out the airplanes before the trip to Capetown, South Africa.

see Long-EZ Way page 5

Long-Ez Way

After some careful route consideration, Mike and Dick may choose to depart Brazil from Recife, go to Abidjan and then into Capetown. Fabio's father, Luiz Miguez is helping them with some lower altitude weather conditions and planning. Luiz is also a LongEZ builder (PP-ZEZ), and he crossed the South Atlantic from Recife to Dakar and then back to Natal. When he's not flying his LongEZ, he's captain of a Hawker 800 based in Sao Paulo, Brazil.

UPDATE EIGHT

Mike Melvill and Dick Rutan spent a leisurely day on Friday in Belem, Brazil. They wandered the market, and had a beer in an open air bar on the docks. Mike said, "While we were there, it rained so hard we couldn't talk to each other!" When the rain isn't being so loud, the music is. He said the stores and street vendors are all vying to play the loudest music. Mike was brave enough to buy and eat a fresh mango, and said it was delicious! Dick wouldn't try one; I guess fighter pilots don't eat fresh mangos. Neither one of the pilots try the agua de jour and use only bottled water - whether they're eating in a restaurant or brushing their teeth. "Dick is determined we will stay healthy!" Mike e-mailed.

The LongEZs are enjoying the trip as well. "The planes are performing incredibly!" exclaimed Mike. One inconvenience shared by both pilots is that they have no room in the airplanes, and it's hard to pack them before take off and still be able to close the canopy. "Twice so far, I have had to get out of the plane and repack my back seat area," Mike shared, "I really wish we had a little more room," he added.

On Saturday, April 12th, Mike and Dick awoke early (no gunfire today), fired up the LongEZ's and flew to Sao Paulo, Brazil where they were met by Fabio and Luiz Miguez.

Mike has faintly smelled fuel in the cockpit since departure from Mojave, but couldn't locate a leak and passed it off as, well, having a back seat full of fuel. At Sao Paulo, he and Dick changed the oil (Fabio had some Shell 100!) and oil filters. Mike said the engines looked like they had not been run at all - zero leaks in either plane! As for the fuel smell, Mike removed the rear seat fuel tank and found the leak. It was in the fuel valve and can be easily repaired.

Dick's LongEZ, Old Blue, had a broken oil breather hose that he'll replace. "That would account for the high oil consumption (6 hrs/quart)," Dick said, "Not good for a long flight over water," he added.

After a morning working on the airplanes, the



Above — Burt helps out how he knows best — by crunching the numbers for Mike and Dick.

Letter to Burt from Mike after he & Dick flew over the South Atlantic. Monday, April 21

Hi Burt, got your e-mail, we flew at 11000ft into an average 11 knot headwind, true speed was 155 knots, average fuel burn was 7 gph, for a total fuel used of 101 gallons. Fuel remaining was 31 gallons. Started with 132 gallons. Outside air temp was 9 degrees C. we flew in heavy rain for the first 30 mins, then in smooth clear air essentially for the rest of the trip. We had to continuously weave between buildups, but doing that while the moon was up was easy. After the moon set, it was unbelievably dark, and we simply flew the heading and took our lumps when we went through clouds. I think we were very lucky, as we only penetrated 4 or 5 of these, and they weren't too bad. More scary than anything else. All systems in the planes are working well, and flight map is the best thing since sliced bread. We are getting used to the PC format computers, and flight map on the PC has several neat features we don't have on the Mac. It may be hard to go back to the Mac after this trip!! I never thought I would ever say that, but I really do like this little Toshiba Laptop. It is very fast, 150mhz, and runs flightmap and the galaxy program simultaneously, an indispensable feature, for our mode of operation. AOL has worked great for us with local phone numbers in every town so far. Using the flash sessions minimizes the time on line, and we have been getting lots of mail from home which we really enjoy. We are leaving for the airport in a few minutes, weather does not look too good so we may be back! Love to all, Mike.

guys went back to the Miguez homestead for a huge family barbecue. "Luiz's wife, Sibella, is a wonderful cook," Mike said, "she has been feeding us the most incredible food."

Mike and Dick will hit the trail again within the next couple of days, but are taking this opportunity to do maintenance and repair on the airplanes, and to rest up a bit. Since they left Mojave, they have each put about 45 hours on the Hobbs meters.

The Toshiba lap top computers are working flawlessly. "I don't know what we would have done without these computers. They are really great!" Mike said. "They are really taking a beating with us climbing in and out of the planes, and with us carrying them in our bags, yet they run perfectly every time," he added.

Communications have been fantastic. Without problem, I receive e-mail and faxes from Dick and Mike while they are in flight. If only we had this available during Voyager days...what a difference a decade makes!

Dick Blosser, from Voyager's Mission Control has made himself available to monitor Mike and Dick every minute they're airborne. They communicate constantly with e-mail via satellite and Blosser keeps them tracked every minute. This unsung hero is in touch with search and rescue worldwide in the event of an over water emergency. Thanks for your watchful eye, Dick Blosser!

At this moment, they duo plans to fly to Recife on Wednesday and will try for Abidjan on Friday. Weather watch will be important - today had a steady 24 knots on the nose. Can't fly into wind like that.

On Tuesday, April 15th, the Miguez family will take Mike and Dick on a tour of the Embraer Aircraft Factory where they make the Brasilia Bandoranti and the 145 jet. Also fabricated there are MD11 flaps and other parts. Then, I hear, they'll do a little more resting...at the beach!

UPDATE NINE

They've had better days... Mike and Dick were grounded by the authorities in Recife, Brazil and were told they would not be allowed to begin the ocean crossing until HF radios were installed on the planes. Bummer. HF radios don't work well

in plastic planes, and besides, where would they put them? A setback such as this could have stalled the tour for a week. But, some great help from the local authorities, and it looks (as of this evening) that they will be on their way tomorrow by 4:00 pm making the 15 1/2 hour flight to Abidjan after all.

They are staying in a beautiful hotel - The Recife Mar Hotel. They checked in and after a little math in US Dollars, discovered that it was an expensive five star hotel at \$350.00 per night! Thankfully, Jeppesen once again came to the rescue and got the room discounted considerably; down to \$95.00 per night. Now, that's more like it.

The guys decided to have a little dinner and went to the Roof Top Restaurant. Dick e-mailed, "Mike and I looked ruffled and probably smelled like goats in our t-shirts and jeans. We can't speak one word of Portuguese and the waiters speak no fighter pilot, but we managed to have a first class meal."

This morning when Dick woke up, he was thirsty, so he called room service and ordered some bottled water. Soon, there was a knock at the door and a full breakfast for one arrived...so much for understanding fighter pilot style Portuguese. And...I think he's still waiting for that water...

The team did have a wonderful time with the Miguez Family. Luiz and Fabio Miguez took Mike and Dick to the Aeroclub where they met Mr. Kovack, a famous Brazilian aircraft designer who designed the two place Tucano (single engine turbo prop fighter/trainer) and is just finishing up an all wood two place home built he plans to take to Oshkosh someday. Dick noted, "Home building is alive and well in Brazil."

Mike and Dick also toured the Embraer Aircraft Factory and were really impressed with the cleanliness and professionalism there.

For now, they plan to take off Friday at 4:00 pm (Brazil time) and land Saturday at about 7:30 am or 8:00 am in Abidjan (Africa time).

Because of the heat and humidity, they have decided that, although they'll go heavy, they won't try to take off at full weight.

We wish them godspeed and great tailwinds as they tackle what will be the longest leg of the flight thus far.

UPDATE TEN

I checked and checked my e-mail for a report, but we didn't hear from Mike or Dick for 17 hours after they landed! We knew they arrived - the satellite communications said that much. Come to find out, after the 14.8 hours airborne, they decided to grab some quick dinner and a quick nap; that nap turned into a 17 hour sleepfest!

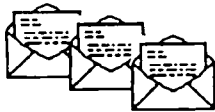
Exhausted? You bet they were...but they made it! They are currently in Abidjan on the Ivory Coast of Africa after a successful crossing of the Atlantic Ocean! They won't stay there long, as on Monday (9:30 am California time) they'll be scooting down to Windhoek, Namibia...that leg is only about 200 miles further than the ocean crossing (only, she says). Because of over country flight restrictions, they will have more dark ocean to view- they have to fly 500 miles off of the coast!

When the sleeping beauties awoke, they were so hungry, but come to find out, Abidjan is closed on Sunday. There were no restaurants open, no grocery stores open, and not a 7-11 in sight. They managed to talk someone out of a Sunday morning king's feast and thoroughly enjoyed some boiled eggs and toast. I didn't ask them what kind of eggs...

The fuel consumption has been excellent. For instance, Mike took off from Recife with 130 gallons and only used 97. Oil consumption has been a problem again with Dick's Old Blue. After their nap, the guys decided to go and check out the airplanes. Dick removed his cowling and there was oil everywhere! Quick discovery lead to a bad oil seal around the crankshaft. Dick e-mailed, "It blew oil out of the breather and burned three times the oil it should have! Very high oil consumption is bad for long over water flights."

see Long-EZ Way page 7

Reader Mail



Frank Nowak (MA) — A recent very heavy snow caused my hangar to collapse and destroy my Long-EZ's canopy. I followed Mike Melvill's directions in CP 36 page 4 with small modifications. I built a jig to hold the canopy frame inverted for lay-ups. Due to a great fit of the new canopy, the job was very straight forward and not nearly such a big deal as I feared.

The secret is to call Jeff Rogers at FOXLITE, a division of Airplane Plastics (513) 879-3362 and give him two very specific measurements. First the length from the tip of the Plexiglas at the nose, to back edge; mine was 68".

Second, the circumference ID of the round end inside the canopy frame; mine was 31". He uses these to blow a new canopy that will fit your old frame. Mine fit almost perfectly around the frame of the old one. Cost was three times what I paid in 1986!

Nick Rushby (England) — Previously, we heard of a cracked VariEze aluminum extrusion on a high-time Eze with a powerful engine. It is still cause for all of us to keep an eye on these extrusions as well as the steel weldment. This builder has since replaced all of his aluminum extrusions with 4130 formed steel angle.

A second occurrence is in the U.K. G-BUPA, a Long-EZ built in 1988 in the USA by David Moore, registered as N72SD, has been raced extensively the past few years. Fracture was discovered in the upper right engine bearer, forward of the firewall and not visible by inspection. I was only discovered by pulling hard on the engine mount and finding movement.

A UK Popular Flying Association modification has been approved. New bearers are machined from 2014 Spec T651 28 Ton H15. Drawings are available from: Graham Banfield, Treetops, The Avenue, Charlton Kings, Cheltenham GL53 9BJ UK Phone +44 1242 514832

Nick Rushby is editor of the Canard EZ News, a newsletter for canard enthusiasts.

Long-Ez Way

Other maintenance was pretty routine, but Abidjan lacks LongEZ stores for convenient shopping. Mike and Dick made a list and handed it to an angel named Patrick G. He left quietly and returned with exactly the right parts!

Getting out of Recife was tough because of the HF radio requirement mentioned in update nine. As soon as the Brazilian authorities approved their departure, African authorities denied entry and refused to accept them. No HF, no landing here... For five hours at the Recife airport, it was a ping pong game. Go - no go - go - no go - GO! With the fifth response the charm and the planes nearly fueled to capacity, they went.

They encountered terrible headwinds across the Atlantic (constant 10-25 knot headwinds) the entire 14.8 hours!

Dick said that at the final GO! they had to consider a night take off over a strange city at a heavy load in hot, humid weather. Hmmm. No guts, no air medals?

Both pilots agreed that while the moon was up, the

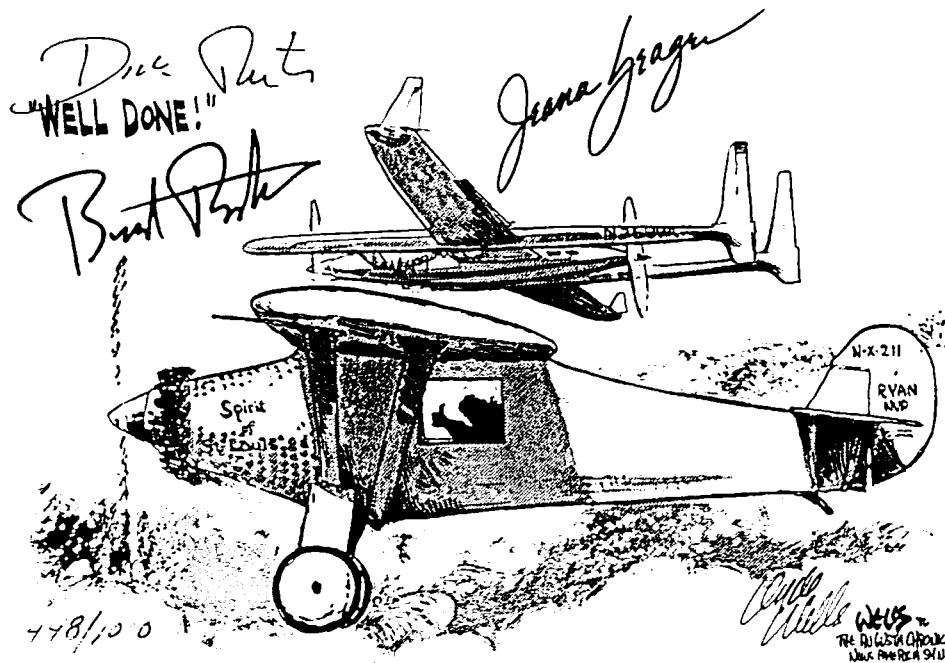
night flying was pretty tolerable, but Mike said, "When we lost the moon, it was as if someone had painted the inside of my canopy black! I couldn't even see the canard!"

The team has received many applauding messages through e-mail central (kelly@hughes.net). One favorite was from Joe Luciano that read in part, "Along with you guys goes the dreams of the aviation community, and the spirit of adventure. It's probably the reason Mike had a hard time trying to pack up the plane and close the canopy; it's because we are all squeezed in there with you!"

Mike and Dick's great adventure around the world continues, but CP 88 must go to print. We wish them true blue skies!

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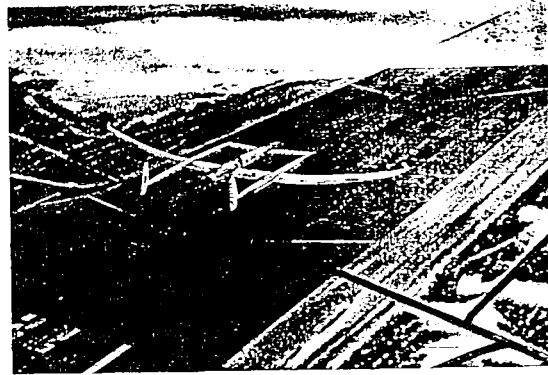
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Fly-In with Friends

Montauk '97
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Montauk Point is a historic landmark, with a 200-year old lighthouse commissioned by George Washington. The village has antique stores as well as other shopping. There is shuttle service from the airport to the beach at the end of the runway. Deep sea fishing, golf, horseback riding, whale watching, etc. are available.

Within 45 minutes EZ Fly-Out radius are resorts such as Nantucket, Martha's Vineyard, Cape Cod, Newport, RI and of course New York City. If you have not made the Hudson River fly-by of the Statue of Liberty, now is the time! The door prizes alone will be worth the flight to Montauk Point even if you hate beautiful scenery.

Airport: N41-04.58, W071-55.25. Runway 6-24 is 3480' x 85' pavement with power lines on runway 6 and dunes on runway 24. CTAF is 122.7. NO FUEL, paved ramp, bring tie downs. Alternate airport is East Hampton (HTO) but is 20 mile cab ride and not included in fly-in cost.

Lodging: Tipperary Inn, owned by Ed Kenny, Long-EZ builder.

Cost: \$79 per person, double occupancy. That is \$158 for all transportation to the Inn, two nights stay, Saturday night prime rib banquet, 4 hour open bar, entertainment, landing and tie down fees (normally \$20).

Send check for \$158 for each room payable to: Ed Kenny or the Tipperary Inn to: Ken Miller, 105 Kraus Rd, Mattituck, NY 11952. Your check won't be cashed until after the fly-in.

For more info contact Ken Miller
(516) 399-9651 (Voice or Fax)

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Fly-In with Friends

MOGIG '97
June 13-15, Butler, Missouri

Butler is 65 miles south of Kansas City and is the relocation site for the OKCGIG and former KCGIG. Be sure to get your motel reservations ASAP!

Plans include all the usual activities, flying races and contests, plus the addition of some terrific "away from the airport" activities. Tentative plans include a local museum tour, carriage rides, a walking tour of Butler's historic buildings, a street dance, and possible shopping in Kansas City, and a **Saturday night BBQ dinner prepared by an award winning caterer.**

Cost: \$12 for Awards Dinner \$10 Registration

Motels: Super 8 of Butler (800) 800-8000
Apache Motel (417) 395-2161

Airport: Butler Memorial Airport (BUM). N38-17.39; W094-20.41. Waypoint: BUM -115.9 074 degree radial @ 7.1 nm. Telephone (816) 679-3092. Elevation: 892'. Pattern Altitudes 1690' MSL. Runways: 17-35, 4,000 x 75' asphalt, Notes: Agricultural ops, ultralights.

Please send fees and RSVP to
Tom Jordan,
401 Havana, Butler, MO 64730
or call Tom (816) 679-3328

Spin-On Oil Filter Adapter for Lycomings

B & C Specialty Products' latest product is the neatest idea I have seen in a long time. It is a 90-degree, spin-on oil filter adapter for Lycoming engines. It is beautifully made by CNC milling out of a solid aluminum billet and bolts onto the accessory case in place of your oil screen housing or AC spin on filter adaptor. It fits perfectly, does not interfere with the magnetos, the vacuum pump or even the mechanical tachometer drive. It also has plenty of clearance on your engine mount and firewall, important considerations when you operate an EZ!

I installed one on N26MS and now have a full flow, spin on champion oil filter, with no high pressure hoses to a remote mounted filter which could leak. It comes with everything you need to install it: a new gasket, new aluminum washer for the vernatherm, and new copper washer for the oil temperature sensor. They even send a small container of the proper sealant for the gaskets. Of course it comes with new Lycoming bolts to mount it.

It is fairly expensive at \$395 but is available to EZ flyers until the end of 1996 for \$350. I am extremely pleased with mine and I heartily recommend it for anyone running a Lycoming engine on an EZ. A fuel flow spin-on filter allows 50 hours between oil changes and prolongs the life of your engine.

Give B&C a call at (316) 283-8662 or fax (316) 283-8000. You'll be glad you did! *Mike*

RAF Recommended Suppliers

These suppliers are still the only authorized RAF dealers for all your various aircraft materials and components.

Brock Mfg.
11852 Western Ave
Stanton, Ca 90680
(714) 898-4366

Aircraft Spruce West
PO Box 424
Fullerton, Ca 92632
(714) 870-7551
(800) 824-1930

Aircraft Spruce East
PO Box 909
Griffin, GA 30224
(770) 228-3901
(800) 831-2949

Feather Lite
PO Box 781
Boonville, Ca 95415
(707) 895-2718

Wicks Aircraft
410 Pine Street
Highland, IL 62249
(618) 654-7447

Prop Manufacturer
600 Superior St
Concrete, Wa 98237
(206) 853-8947



MOLDED VORTEX GENERATORS

These pre-molded generators are specially engineered for aircraft application. Available in white, they can also be custom molded in quantity to match specific paint colors for aircraft manufacturers and OEM suppliers. After installation, the sail appears to be molded an integral part, rather than an "add-on". The final result not only looks better, it performs better than typical hand-made aluminum fences. Molded vortex generators adhere better, do not corrode, require no painting and are easy to install: one Long-EZ canard can be equipped with a full span of generators in less than 90 minutes.

A kit containing fifty generators is available for a price of \$25.00 plus \$2.00 shipping and handling per kit. Two kits are sufficient to equip the full span of a typical canard (i.e. Long-EZ, Dragon-Fly, et al) or both ailerons on either canard or conventional planforms. Documentation is included. Please send check or money order to:

CCI, PO Box 415, Quakertown, NJ 08868-0415
Please allow 2-3 weeks for delivery, Sorry, no COD's.

Note: These vortex generators are not TSO'd for use on type-certificated aircraft.



Canopys

Airplane Plastics

8300K Dayton Rd, Fairborn, OH 45324

(513) 864-5607

FLUSH, INTERNALLY MOUNTED ANTENNAS

A complete line of antennas, specifically designed for, and flight tested on, composite aircraft. The antennas are tuned for maximum performance and in general those who have used them so far report reception is doubled over standard external antennas.

VariEze builder/flyer Bill Butters has started a company to develop a full range of buried antennas. These are normally supplied with a BNC connector built into the actual antenna, but can be supplied without connectors to include enough length of co-ax cable to facilitate easy installation with minimum weight and bulk.

Call Bill Butters **800-758-8632** Advanced Aircraft Electronics, PO Box 4111, Florissant, MO 63032

Feather Lite



LONG-EZ PARTS PRICE LIST

Main gear strut	\$349.00	
Nose gear strut	\$58.00	
Engine cowls, pr. (glass)	\$329.00	
Engine cowls, pr. (Kevlar)	\$480.00	
Cowl inlet	\$48.00	
Wheel pants (3.5x5)	\$150.00	
Wheel pants (500x5)	\$180.00	
Above item in Kevlar	\$215.00	
NG 30 cover	\$21.00	
Pre-cut canard cores	\$160.00	
Pre-cut wing & winglets		\$1199.00
Leading edge fuel strakes w/bulkheads		\$524.00
Strut cover SC	\$19.50	
Nose wheel cover NB	\$19.50	
Sump blister	\$19.50	
NACA inlet	\$47.00	
3" extended nose gear	\$70.00	

Feather Lite, Inc. is proud to announce another product to re-introduce to EZ builders: The original Space Saver Panel by the late Rusty Foster. This is a bare fiberglass panel with a molded recess for builder installation of an aluminum flat stock electrical panel. \$40.00

Contact Michael Dilley or Larry Lombard (both former RAF employees and EZ builders and flyers)

**Feather Lite, Inc., PO Box 781
Boonville, CA 95415
707-895-2718**

TITANIUM ACCESSORIES AVAILABLE!

Custom anodized to any of 15 different colors, shades of copper, purples, blues, greens, yellow/gold, even rainbow effect. Rudder and aileron gustlocks - \$20.00-30.00.

GU canard full span vortex generators with layout template - \$170.00. These are very exciting! Rudder horn CS-301L&R replacements, \$25/pair. Shipping inc.

**Ti Specialties, PO Box 1052
Grover Beach, CA 93483-1052
805-489-8155**



STARTER FOR 0-200 CONTINENTALS

B&C Specialty has introduced a beautifully made, 12 volt starter specifically designed to be installed into the accessory housing on a Continental 0-200 engine, or on an 0-240.

This starter has been thoroughly tested at Teledyne Continental (more than 5000 start cycles without a single problem!).

Bill Bainbridge has these starters available for immediate delivery and they can be had STC'd or for homebuilts.

Contact: **B&C Specialty Products, Inc.**
123 East 4th Street, Newton, KS 67114
316-283-8662



Mike and Dick actually sat down for a few photos by Kelly Hall before they took off on their 'round the world Friendship Tour April 4. Story update inside.

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