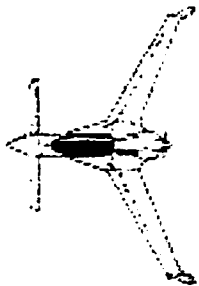


CP# 107-1 #108



CANARDPUSHER

JANUARY 2002 RUTAN AIRCRAFT FACTORY VOL 18 ISSUE 1 NO. 107

#108

Heartfelt condolences from airline pilot Hans Georg Schmid

I would like to express my deep sorrow and heartfelt condolences to the American Nation and to you personally because of the terrorist attacks to your nation. I am still deeply shocked and angry.

On September 11, 2001 I was called out of reserve duty to fly to West Africa on a MD-11, returning only this morning back to Switzerland. In my hotel, I have been almost incommunicado as it was not possible to go into the Internet, probably because of the local antiquated phone system.

Approaching Malabo, an oil rich tiny island off the coast of Africa, to deliver and pick up several dozens of oil workers, I received the following ominous data link message from SWISSAIR Headquarters in Zurich:

TTY FROM GND 11SEP01
MSG FROM HDQOLSR
attn all

*please confirm regular operations
north atlantic bound flts confirm
destination and eta. please reply*

My answer at 15.07 Z:

*OPS NORMAL.
ETA SSG 15.53 Z.
RGDS HG SCHMID*

At this moment, at a position south of Kano / Nigeria, I knew something was possible wrong and I tried to tune in on BBC world service on my short wave radio. As it was day and as I had only one frequency, unfortunately only static was to be heard.



Shortly thereafter, already in the descent towards Malabo, I got the following second data link message:

TTY FROM GND 11SEP01 1536Z
MSG FROM HDQOLSR
attn all - for info
*2 commercial aircraft crashed into
world trade centre nyc - a third into pentagon.
All airports usa closed.
All sr us bound flts diverted or return to zrh.*

As my first officer made the approach to the tiny airport I informed him only after landing so as not to distract him and I took over the flight 50 minutes later to Douala / Cameroon.

It was difficult to concentrate in between thunderstorms and turbulence and not to think about what just had happened. During the stay in West Africa with a flight to Libreville and back, I then had ample time to find out on CNN about the tragedy that had happened.

Again – also a bit late - please accept my deep felt sympathies and my sincere condolences.

*HG Schmid, Switzerland
www.millenniumflight.com*

BRIEFS

Feather Lite Inc. has a
NEW ADDRESS:

Feather Lite Inc.
1327 South State Street,
Ukiah Airport, Ukiah,
CA. 95482

New phone:
707-462-2939

RAF HOURS: Rutan Aircraft is officially open every Wednesday. Please call between 10 am - 2 pm (661) 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 or Nell at RAF Monday thru Friday.

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.

RAF ADDRESS

1654 Flightline, Mojave, CA 93501

PHONE NUMBER

(661) 824-2645

FAX NUMBER

(661) 824-3880

EMAIL ADDRESS

raf@antelecom.net

WEBSITE

www.rutanaircraft.com

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

RAF is no longer accepting
multi-year subscriptions. Please
renew only after your current
subscription has expired.

If you are building a
RAF design, you must
have the following
newsletters:

VariViggen (1st Ed)

CP 1 to current

VariViggen (2nd Ed)

CP 18 to current

VariEze (1st Ed)

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.

My story begins with WWII and ends 48 years later. I was stationed at Clark Air Force base in the Philippines and like thousands of G.I.'s waiting my turn to return home as the war had just ended with the surrender of Japan. My tour of duty as an aircraft mechanic began in the jungles of New Guinea, then down to northern Australia repairing war weary B25's, the medium bomber which raided Tokyo for the first time and lifted morale of Americans while demoralizing the Japanese. With the war ending we parked most of our aircraft and those whose job was "to keep them flying" were reassigned to other jobs.

My reassignment was to the motor pool repairing jeeps and various other types of WWII vehicles. It was on this assignment that I became acquainted with Lt. Bob Schmidt, a pilot who was put in charge of the motor pool. Bob and I became friends and invited me to go flying with him in an L-5, a small observation aircraft. This flight evolved into my first flying lesson and the flying bug bit me so hard its painless scars are still with me today.

Shortly thereafter Bob returned to his hometown and a job with General Motors in Pontiac, Michigan. I likewise returned to Pensacola, Florida and

elected to return to auto repair, which developed into a very successful business of my own with some special equipment I developed and patented.

After establishing myself in business, I decided it was time to pursue my interest in flying. I bought and rebuilt a wrecked airplane and used it to build up experience and flying time. Looking for a new challenge, I became interested in homebuilt aircraft. I joined the Experimental Aircraft Association (EAA) and started attending their yearly get together at Oshkosh, Wisconsin. It was there I met Burt Rutan the young aircraft engineer who would escalate to become one of the worlds most talented and respected aeronautical engineers. Burt designed a beautiful, efficient and high performance two-place aircraft named the Long EZ. The name Long EZ defines its ability to fly long distances non-stop at unheard of fuel economy. It has been flown to the unbelievable altitude of 30,000 feet without supercharging. A cruise speed of 200 mph is not uncommon, several have been flown successfully around the world. I bought the plans to this aircraft from Burt and after 8 years of spare time I took to the air with my creation. That first flight was one of the most thrilling experiences of my life.

Thanks to Burt for the design of such a wonderful aircraft. The years drifted by and I ran across Bob's address and I wondered if he was still alive. I decided to see if information had a listing and sure enough I was able to obtain his telephone number. Some 42 years had gone by and we re-established our old friendship. In as much as he had some relatives in the general area near where I live, our reunion

was a must sometime in the near future. Shortly thereafter, I received a call from Bob saying he would be driving down to the Alabama coast to visit some relatives and would be staying in Pensacola and visit overnight on his return trip to Michigan. I anxiously waited to hear from him. One mid-afternoon I received a phone call from him saying he had checked into a hotel which was a short distance from my place of business. Within five minutes I was knocking on his hotel door. We exchanged greetings and immediately got into my car and drove to the airport, as a fast moving cold front was rapidly approaching from the west. I knew we had to get airborne quickly before the storm arrived. I opened the hangar door and rolled out my favorite toy, which I had named Skyward Connection.

After giving Bob a briefing on the controls and strapping ourselves in, we put on our headsets which gave us the ability to talk to each other in comfort and muffle out the noise of the aircraft. Bob's wife Marcella, armed with a camera, took numerous photos before and after takeoff. As we turned onto the runway and lifted off, I almost immediately executed a left climbing turn. The aircraft with its beautiful and unusual design painted a beautiful silhouette against a crystal blue sky. We leveled off and within minutes were flying at a low altitude parallel to the world's

most breathtaking beaches and blue water of the Gulf of Mexico as they kissed the sugar white sands of Pensacola beach. We noticed a school of sharks about 200 feet off the shore searching for food. I then climbed to a comfortable altitude and turned the controls over to Bob and gave him the feeling of Pilot in Command. Bob thoroughly enjoyed that old feeling in guiding the plane through the air at his command. He marveled at how responsive the aircraft was to his touch. He gave the controls back to me and it was back to the airport for the end of the flight.

As I lined up on final approach, I said a little silent prayer, Please God help me make this a good landing. Shortly thereafter, my prayer was answered as my landing was as smooth as silk. After we disembarked and rolled Skyward Connection into the hangar Bob and I shook hands and I remarked, "Bob, forty-seven years later it was my turn."

That evening over dinner at our favorite seafood restaurant, Bob and I reminisced about old times back in WWII and the thrill we got out of our reunion flight. The next morning as Bob and Marcella looked out of their hotel window the storm had passed and snow now covered their car and the ground. Quite a rare sight for a coastal city like Pensacola. After they arrived back in Michigan, I received a nice letter from him and his wife with pictures of our flight.

The next time I heard from them it was a letter from Bob's wife telling me Bob had become a victim of a fast acting cancer and had taken a heavenly flight, this time aboard the Heavenly Connection. As Bob traveled in Heavenly Connection there was no sound from the heavenly powered flight and the speed was unlike any Bob had ever witnessed.

God speed old friend and pilot.

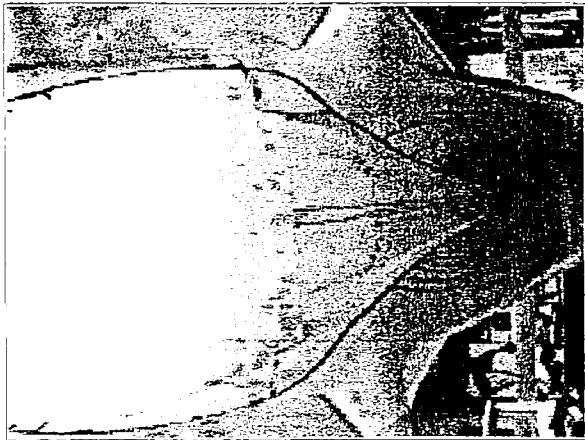
"FORTY SEVEN YEARS LATER IT WAS MY TURN"

By John J. Guice



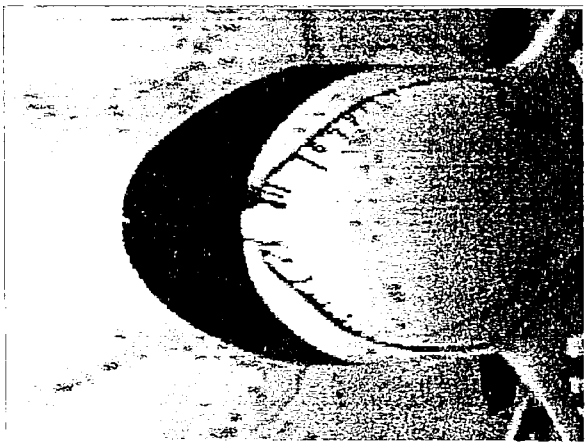
Oil Smear Test

I was hoping Burt and/or Mike could help me by taking a look at the enclosed oil smear flight test photos detailing the NACA performance on my Long-EZ.



I have Delta P test equipment installed and showing only ~ 55 KIAS Delta P at 120 KIAS.**I am experiencing high CHT temps (3&4 CHT are highest at ~430, 467 F respectively) and going through all the CP's and Central States information on solutions.

Please look at the results (I am getting MANY VARIED opinions on what these results show and am now thoroughly confused).



Is my NACA performing poorly? (I believe based on cooling effect, Delta P's and Oil streaming photos show VERY LITTLE AIR is actually entering the cowling.)

Thank you very much in advance
Gary R. Ernest

Continued on page 5

Gary,

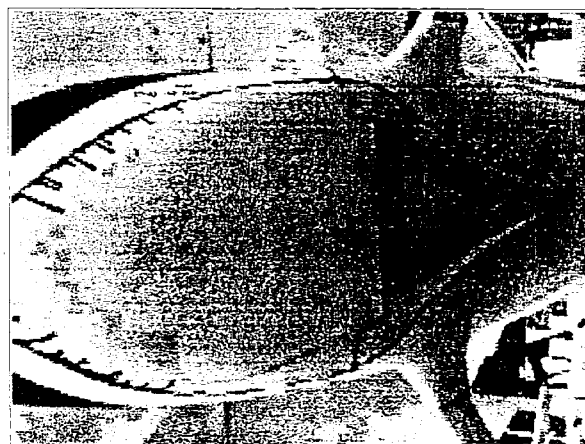
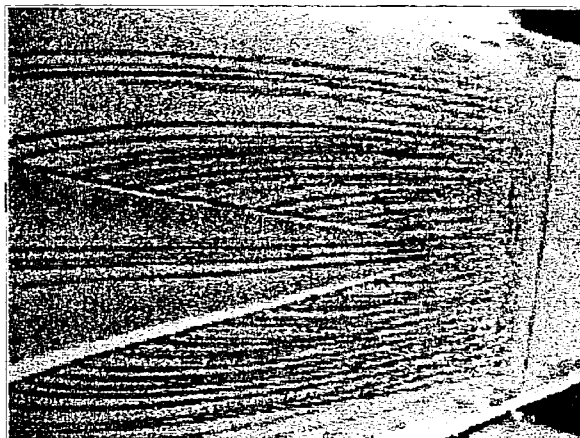
The fact is that most EZ flyers with the flush NACA inlet have CHT and/or oil temp problems. That is why I went to the armpit cooling several years ago.

The NACA inlet seemed to work adequately on N79RA, however, I had to top overhaul my O-235 three times in 900 hrs, each time I was told the cylinders were running too hot. This is typical of the reports I see on the canard web page. This also explains why we see so many builders trying all the variations on cooling, including down draft cooling.

The cooling system I have now works very well. Dick also used it for the round-the-world trip, with no complaints. A few builders have also installed this system, and I have heard of no problems. Featherlite sells the cowling/cooling kit.

Looking at these oil flow tests, it looks to me as though the NACA inlet is actually working, (3rd pix) but there just is not enough pressure recovery to do the job.

Mike



Holy Sierra Hotel Igloo Tango!

by Doug Shane

ANN Exclusive: More Power for Jimmy Franklin

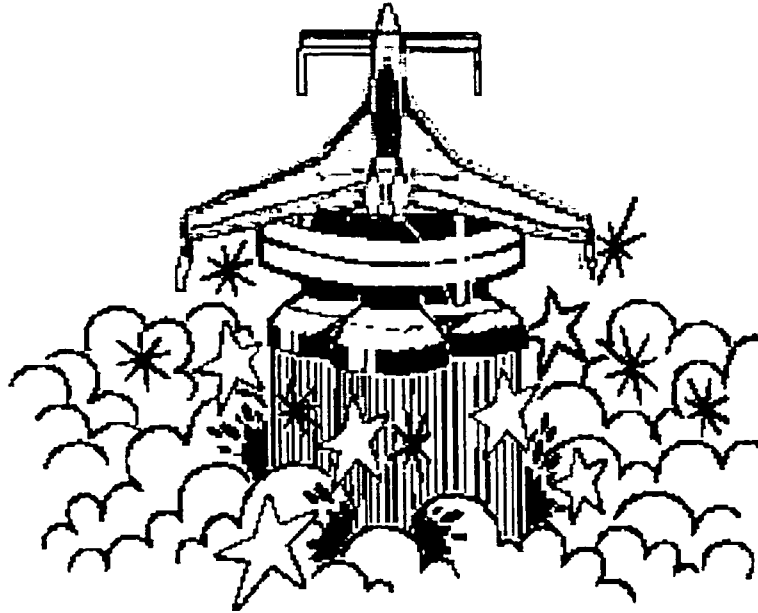
The Jet-Powered Waco Was Just the Beginning (shudder...) After hearing from ANN Reader Richard that air-ace Jimmy Franklin was involved in a new machine, we just had to find out for ourselves. We got a message from Richard that said Franklin is involved in building a jet (twin) Long-EZ. "It'll fly straight up at 400 knots," said my informant, a local airport manager in Kansas. "We knew you'd like to hear, too."

Franklin is keeping his Wacos. This is extra. We called the King of Noise at his place in Missouri, to ask about the creature he's building. He set us straight, right away. "Les Shockley is building that airplane," he said. "I'll be flying it."

In case you thought you'd get the world's fastest-climbing Waco — if you put in your bid to Franklin Airshows fast enough — you won't. Mr. Franklin dashed our foolish dreams. "I'm keeping both Wacos," he informed us. "We'll use them whenever we can."

Back to the rumor: Franklin said Les isn't new to this game. "He installed the jet on the Waco — he's the jet guy."

As for the jet-powered "Long-EZ" [it's really just based on that Rutan design, with hundreds of major modifications. We're calling it an EZ because there's just nothing else we could



relate to it — ed.], "That was an idea I'd had for over twenty years," Franklin said. "Nobody wanted to help me do it. Les got all excited about it, and he, well, just did it. After I explained what I wanted to do, he said, 'bring it to Kansas — let's do it!'"

What is "IT?"

The engines are derived from venerable GE products. "It's a CJ-610-6. The military version is the J-85 — like in the Tutor, F-5, T-38, all kinds

of things. Even the C-123 used the J-85."

When will it fly?

"We're hoping to fly it some this year," he warned. Now that Les has gotten the thing well on its way, Franklin let us in on more: "That idea — the Long-EZ — was all Les's idea. He liked the airplane, and wanted to figure out how to make it better. Of course, more power is better." It's not really fair to call it a Long-EZ, though: "It's redesigned and built from the floor up, to do what we're going to do with it. It's definitely not a straight Long-EZ."

Power makes it go. Lots of power makes it go like heck... "This thing's going to have a 2:1 power ratio on the other side," Jimmy told us. "Two pounds of thrust for every pound of airframe. It can have more than that, if we want it to." What about a 45-minute reserve? "It's not going cross-country — it's going in a trailer. Fuel's not a factor," he said, reassuringly.

We talked with designer/builder Wes Shockley. He told us that power is effectively 'modular.'

"With two engines it'll have a 2:1 power-to-weight ratio. There's the option of three engines, as well," he said. Everything will need to handle a lot more power than originally intended — up to ten times the original power can make one take stock of the littlest things, you know. "I'm redesigning the canard; what we're building is 6-8 feet longer than a Long EZ — and it's just a single-seater. The back will hold fuel header tanks, a ballistic chute, and aerobatic oil tanks. The airplane's going to weigh about 1200 pounds, without fuel or pilot. With a pilot and enough fuel, it'll weigh about 1500 pounds — and it'll get better [the power to weight ratio] as it goes."

This machine had better be strong. "It's built super-stout," Les told us. "Some engineers who have helped us, don't want to be recognized — they work at this professionally. The list of people you might have heard of is pretty long, and pretty strong — the folks who have helped out."

He's talked with aerodynamicists, too. "We've had a lot of discussions about how we're going to stop flutter, etc., and so I guess I'm the total designer of the thing."

Some of his professional-engineer friends "did a stress analysis — they gave us a 32g wing, with a 50% safety factor, and a 60g canard, with a 100g driver's area. 50gs on the engine mounts — it's really stout. It's got a 2.5' tall center stick — every single piece is heat-treated to 38C Rockwell. It's just unbreakable," he said assuringly.

What's it for?

Les said, "I'd like to get the time-to-climb records; a Russian creation went to 9000 meters in 1:05 (65 seconds), from brake release. It's almost a moon shot. [What it is, is 450 feet per second altitude gain, average. That's an average vertical velocity of better than 300 mph — ed.] I've built a number of jet-powered race cars; I've done [Jimmy Franklin] Waco; put a turbine on a Sukhoi, too."

"I was worried about the transsonic speeds of the airfoils. As far as they go, I've found out, it should operate at 500 mph at sea level." The machine should go from 0 to 250mph in about 6.5 seconds, so after about 3 seconds on the ground, I figure we can go vertical, and then accelerate vertical. The thing I want to do is fly it about 25 mph slower than the transsonic speed of the airfoils — that's an indicated airspeed of

about 420 mph — that's about 600+ at 29,000 feet. The engineering gurus figure this can go from sea level to 30,000 feet in 60 seconds. If we can fly this at 400~450 indicated, we'll do it."

Former Navy test pilot Len Fox will be the first to fly this monster, perhaps as early as Oshkosh; then Jimmy Franklin will fly for all its airshow appearances.

What gave him the idea?

"I saw a Berkut do three 360s inside one F-15's 360 at an airshow — I finally made the decision, about five years ago, to build this thing," he said.

Luck played no small part, as did being in the right place, at the right time. "As luck would have it, I went to Sun 'n Fun about 2 years ago, and in a composite seminar, there were some fellows with an E-racer — I explained what I wanted to do; they finally took me seriously. They told me the only place to go for help on the 'glass work, was the EZ Hangar (Robert and Valerie Harris, Covington, TN). I went directly after Sun 'n Fun, to Tennessee to visit with these folks. They really perked up — Robert's been wanting build a jet-powered canard craft for a long time. I'm setting him up with a modified jet engine, for his project — he's helping with mine." In case two engines aren't enough power, the design will allow for three; and there's a low-tech secret weapon available, too: "... the engines will have afterburners. They make about 1500 pounds thrust apiece." That oughta be enough, huh? [Stay tuned to Aero-News — photos are on the way! — ed.]

Meanwhile, the Waco rocks...

What are Franklin's immediate plans? Where you can see and hear that famous Waco? He told us: "We'll be in Columbus (GA) March 23, 24; there's maybe a couple tentatives between now and then. Then Sun 'n Fun; then the rest of the world." Be ready.

> FMI: <http://www.franklinairshow.com>

Builder Questions

John O. Kosa — With reference to CP 106, do the same weight limits apply to the John Roncz canard? And do the same chord lengths also apply?

Mike Melvill — Yes, the elevator on the Roncz canard should have exactly the same chord as the elevator on the original Long-EZ GU canard. 4.6 inches is the designed and desired chord width. The maximum tolerance is plus or minus 0.2", but for best results, the chord should be 4.6" as it is on the prototype test article. The weights also should be very close to the same.

Actually it is possible to build the Roncz elevators to weigh slightly less, which is OK, but the maximum allowable weights are the same as called out in CP106.

Checking the balance on the Roncz elevators is not quite the same, due to the radically different hinge pivot position relative to the elevator. See CP108, page 4-5 for the correct method of checking balance on Roncz elevators.

If you build these elevators correctly, there will be no need to add any extra mass balance weight. If any extra lead is needed, it is critical that all additional required weight be installed on the outboard mass balance. No additional lead should ever be installed on the inboard end of either elevator.

Steve Wright — Just got off the phone with Jack Fehling who landed his burning Velocity several weeks ago on I-95 in Florida. The engine blew a cylinder which caused the fire. After landing they rolled into a truck stop where the fire was put out by the truckers. The 477 epoxy coated firewall did the job and prevented fire from penetrating the firewall. I decided to use this on my Stagger EZ firewall after testing this material on a variety of surfaces with a propane torch last summer. It's made by Fire Research Labs ..I got it at hy-grade coatings 1-800-783-2449.....about 100.00 per gallon ask for Jim Reinhold.

Two or three thick coats is recommended. It can be sprayed or rolled on. Jack plans to use a thin stainless sheet over the 477. Is this a better fire barrier than what is called for in the plans? Would the Cozy or Long-EZ firewall protect just as well? I don't think any of us can answer these questions. It's an option and can certainly be used in addition to the Plans firewall system.

Jonas-strutt Audrey — My EZ (ser. no. 21930) wing attachments are disintegrating, that is the aluminum is separating, that is flaking off. Have you heard of this happening? If so what was done, or can anything be done to stop this condition? Can the attachments be replaced or must I part my old bird?

Burt Rutan — This is a real tough one. As described in an early newsletter the aluminum components need corrosion protection for all but our dry desert environments. They are not easily replaced, since the units are jiggled as a unit during construction. I have seen others resort to building new wings and center section to deal with wing attach corrosion.

There may be a way to avoid this but RAF has never worked out or approved a repair procedure.

Accident Report

On March 12, 2002, at 1815 central standard time, a Tillman Long EZ homebuilt airplane, N126DT, was substantially damaged during a forced landing following a loss of engine power during initial takeoff climb near Lockhart, Texas. The commercial pilot, who was the sole occupant, was not injured. The airplane was registered to and operated by the pilot. Visual meteorological conditions prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The local flight departed the Lockhart Municipal Airport, Lockhart, approximately 1800.

The pilot reported that he had not flown the airplane in approximately 3 weeks, and planned to fly the airplane around the traffic pattern. The pilot taxied the airplane out from the hangar, and performed a "normal" engine run-up prior to takeoff. Shortly after takeoff, approximately 200 feet agl, the engine "didn't want to go anymore." The pilot executed a left teardrop turn, switched the fuel tanks, and attempted to gain altitude. Unable to make the runway, the pilot initiated a forced landing to a field. During the ensuing forced landing, the airplane struck a fence and the right wing separated. The pilot stated that the airplane contained approximately 20 gallons of fuel prior to takeoff.

RAF Merchandise
Order Form

Owners Manuals

Long-EZ (\$12) ___ VariEze (\$8) ___

Solitaire (\$8) ___ Defiant (\$15) ___

PLANS

___ Building Moldless
Composites Manual \$16.00

___ Viggen RC Model Plans
\$14.00

___ Large rudder plans
\$20.00

___ Speed brake plans
\$14.00

___ 0-235 engine
installation \$21.50

___ Roncz canard plans
\$42.50

___ Flush belhorns plans
\$14.00

Foreign checks — Please ensure your check or money order is routed through a bank with an USA address. Traveler checks and post office money orders are OKAY
International orders — please add \$5 postage except for Newsletter Orders



New *COLOR* litho poster based on painting by aviation artist Stan Stokes.

POSTERS

___ New litho poster based on painting by aviation artist Stan Stokes. Beautiful quality 17x22 poster depicts family of RAF projects, including Voyager \$18

___ Long-EZ "Cut Away" drawing (see CP 33) 23x33, depicting a "see-through" Long EZ drawn in black ink. You can see fuselage, engine, gear and wing innards. There are close-up drawings with explanations of the nose wheel retraction system; rudder and brake system; aileron control circuit and airbrake operation. It is printed on brown creme paper. \$15

___ 11x17 Jim Sugar night poster . This unique sunset scene of Voyager, Solitaire, VariViggen and Long-EZ was shot by National Geographic photographer Jim Sugar \$12

___ 11 x17 Defiant on water \$8

___ 17x22 Canard 3-ship VariViggen,
VariEze and Defiant fly in harmony \$12

___ 8x10 color photos (choose LongEZ, Defiant,
Solitaire) \$3

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.

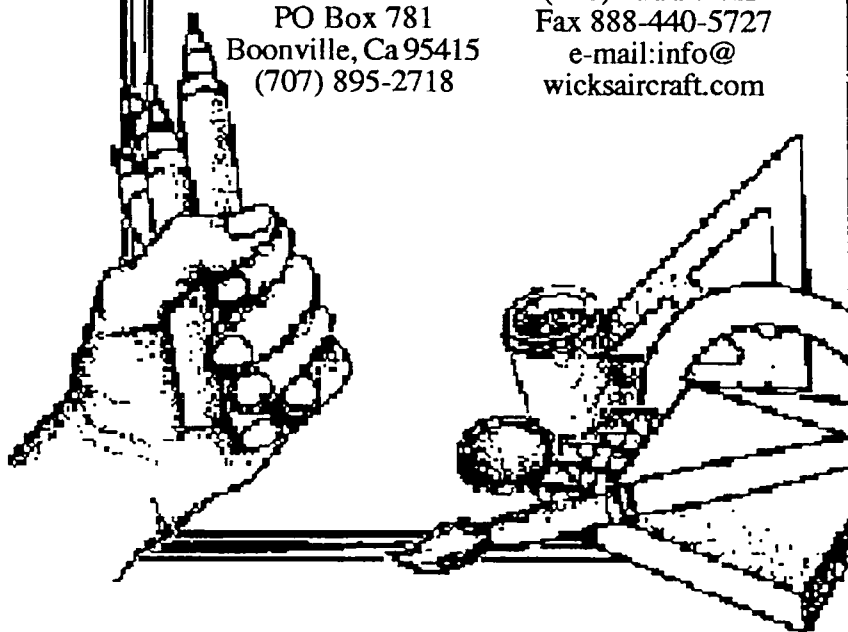
Brock Mfg.
11852 Western Ave
Stanton, Ca 90680
(714) 898-4366

Aircraft Spruce West
PO Box 4000
Corona, Ca 91718-9961
(909) 372-9555
Fax (909) 372-0555

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

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

Wicks Aircraft
410 Pine Street
Highland, IL 62249
(800) - 221-9425
Fax 888-440-5727
e-mail:info@
wicksaircraft.com



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 Inc.

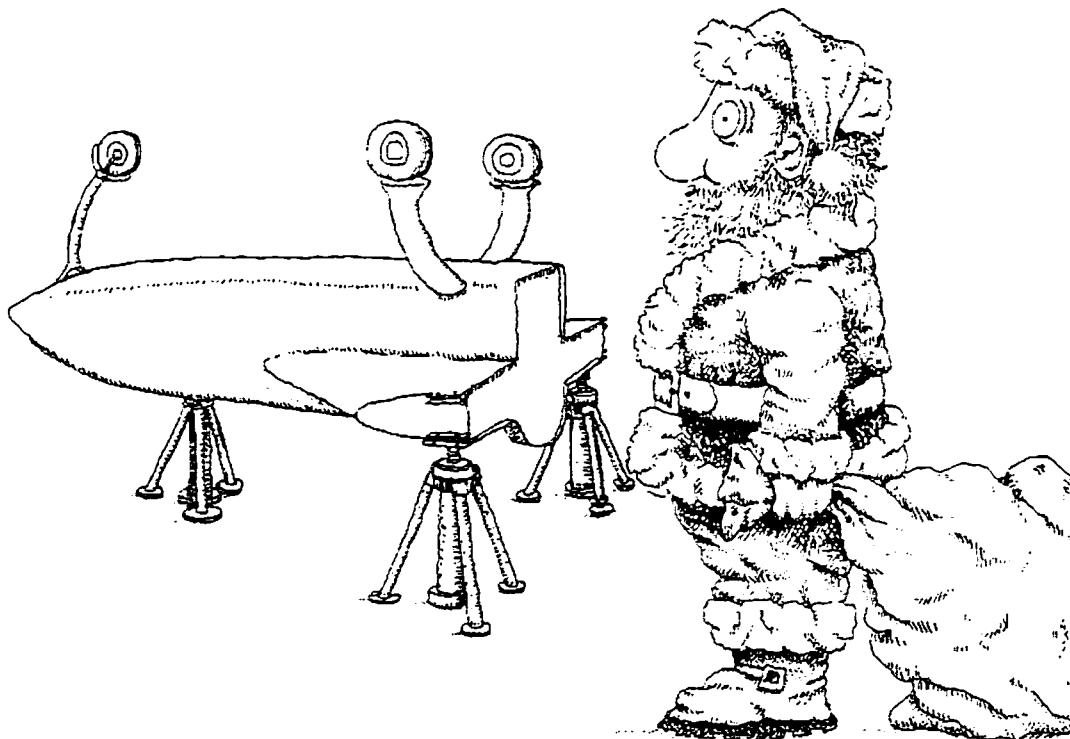
LONG-EZ PARTS PRICE LIST

Main Landing Gear Strut	\$379.00
Nose gear strut	\$64.00
Engine Cowl Glass Top & Bottom Set	\$369.00
Engine Cowl Kevlar Top & Bottom Set	\$499.00
Cowl inlet	\$ 60.00
Wheel pants (3.5x5 set)	\$170.00
Wheel pants (500x5)	\$195.00
Wheel Pants Kevlar	
500x5 Set original style only	\$230.00
NG 30 cover	\$23.00
Pre-cut Foam Cores Canard	\$180.00
*Pre-cut Foam Cores Wing & Winglets	\$1180.00
Leading Edge Fuel Strakes	\$420.00
Bulkheads Left & Right	\$199.00
Strut cover SC	\$23.00
Nose wheel cover NB	\$23.00
Sump blister SB	\$23.00
Carb. Air Box Kit	\$165.00
Baggage Pod Set	\$395.00
Nose Bumper Rubber	\$10.00
NACA inlet	\$55.00 (requires cowl modification)
Propellers, with rain leading edge (call for quote)	

Contact Michael Dilley or Larry Lombard
(both former RAF employees
and EZ builders and flyers)
Feather Lite, Inc., 1327 South State Street,
Ukiah Airport, Ukiah, CA. 95482
707-462-2939

A check or money order is required to process orders.
Orders are filled by postmark date.
California residents add 7 1/4% sales tax.
All Truck orders shipped freight collect.
We've negotiated a 40% discount with Viking Freight.
Please include a telephone number, a mailing and a street address.
Please allow 30 days for delivery, we will expedite when possible.
We will discuss questions regarding our products by phone or mail.

*Items must be shipped by truck.



**HO HO HO, ONLY
90 % to GO!**

Card from
Ryszard & Claire Zadow
Waller, TX

RUTAN AIRCRAFT FACTORY
1654 Flight Line
Mojave, CA 93501

PRSR STD
U.S. Postage Paid
Mojave, CA
Permit No. 75

Inside

Heartfelt Condolences	Pg 1
47 Years Later	Pg 3
Oil Smear Test	Pg 4
ANN Exclusive by Doug Shane	Pg 6
Builder Questions	Pg 8
Accident Report	Pg 8
RAF Order Form	Pg 9

January 2002
CP 107

If your label says **LAST ISSUE CP 107**, this is your last issue and you need to renew.