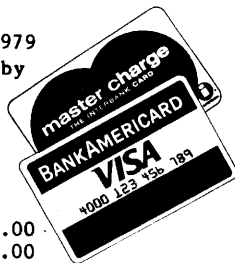


# QUICKIE NEWSLETTER

No. 4 April 1979  
Published quarterly (Jan, Apr, Jly, Oct) by

Quickie Aircraft Corporation  
Post Office Box 786  
Mojave, CA 93501  
(805) 824-4313



Newsletter Subscription (1 yr.)\* \$6.00  
Information Package (2nd edition)\* \$6.00  
Pilot's Manual\* \$8.00  
Quickie Construction Plans\*\* \$150.00

\*Add \$1.00 for Air Mail overseas (U.S. funds)  
\*\*To be used with the Quickie Aircraft Kit.  
Also, purchasers of the plans are entitled to a \$150.00 discount on the purchase price of a Quickie Aircraft Kit. California residents should add 6% state sales tax.

Quickie Aircraft Corporation is located on the east end of the flight line at the Mojave Airport, Mojave, California, which is located approximately 80 miles north of Los Angeles. You are welcome to come by to see N77Q, the Quickie prototype, to ask questions, and to bring in parts of your Quickie for inspection. The building number is 68.

We are normally open from 9 to 5 on Tuesday thru Saturday, but you should call first if you are coming from far away, since we occasionally must close the office to attend a flyin, conduct business, etc.

Tom or Gene will be available to answer general inquiries from 1:00 to 5:00 on Tuesday and Thursday, and from 9:00 to 5:00 on Saturday. We would prefer that builders call us with questions at these same times. All times are PST.

Weather permitting, each Saturday at 10:00 we will give a flight demonstration with the Quickie.

When writing to QAC, always send a stamped self-addressed envelope along if a reply is necessary.

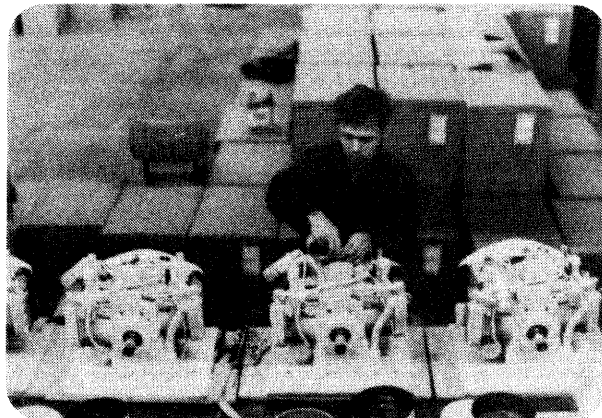
## CONSTRUCTION SEMINAR SCHEDULE

This newsletter has been delayed a week in order that we might complete our scheduling for the construction seminars that we would like to do this spring around the country.

The purpose of the tour is twofold: first, to provide information on the Quickie program to all interested people, and second, to educate people in the proper techniques and quality control procedures to be used with the construction of the Quickie; so come prepared with questions, example of your workmanship, etc.

What follows is a tentative schedule through June 1979 with the date, location, and person to contact for further information:

- Saturday, May 5, 1979 Atlanta, Georgia  
CONTACT: John T. Griffin, Jr.  
420 Northland Road  
Mableton, Ga. 30059
- Sunday, May 6, 1979 Dallas, Texas  
CONTACT: Charles Penry  
4238 Crest Haven  
Dallas, Tx. 75209
- Friday, May 11, 1979 Washington, D.C.  
CONTACT: William H. Meserole  
15216 Manor Lake Drive  
Rockville, MD. 20853
- Friday, May 11, 1979 Salt Lake City, Utah  
CONTACT: Jerry Turner  
7281 South Highland Drive  
Salt Lake City, Utah 84121
- Saturday, May 12, 1979 Denver, Colorado  
CONTACT: Rich Idler  
2659 Gray Street  
Wheatridge, Co. 80214
- Saturday, May 19, 1979 Eugene, Oregon  
CONTACT: Alfred A. Rise  
600 Cherry Dr. #7  
Eugene, Or. 97401
- Sunday, May 20, 1979 Seattle, Washington  
CONTACT: David G. Woodcock  
12614 S.E. 62nd Street  
Bellevue, Wa. 98006
- Sunday, May 27, 1979 Phoenix, Arizona  
CONTACT: Don Santee  
4510 N. 13th Avenue  
Phoenix, Az. 85013
- Wednesday, June 13, 1979 St. Louis, Missouri  
CONTACT: Howard Henderson  
444 Bryan  
Kirkwood, Mo. 63122
- Saturday, June 16, 1979 Wichita, Kansas  
CONTACT: Jim Wiebe  
933 S. Ash  
Newton, Ks. 67114
- Monday, June 18, 1979 Kansas City, Kansas  
CONTACT: Warren Curd  
11201 #. 74th St.  
Raytown, Mo. 64133
- Wednesday, June 20, 1979 Minneapolis, Minnesota  
CONTACT: Burleigh Peterson  
12801 April Lane  
Minneapolis, Mn. 55343
- Saturday, June 23, 1979 Dayton, Ohio  
CONTACT: John Dyke  
2840 Old Yellow Springs Road  
Fairborn, Ohio 45324



Tom busily modifying an engine. In addition to the engines visible on the table, everyone of the boxes behind him contains an engine.

As this is being written, we are still trying to finalize seminars in Florida, Milwaukee, and perhaps New Jersey. Contact us for further information.

Because of the tight scheduling, as well as the fact that Gene and Tom will be going in different directions sometimes, we have decided not to bring N77Q along. In its place, we will bring color slides and a good 16MM color movie film.

N77Q will fly to, and be on display at, the Chino, CA Airshow on April 28/29.

## QUICKIE SALES AND DELIVERIES

As this newsletter is being written, total Quickie Kit sales are approaching 245. The delivery time on the Quickie Aircraft Kit and/or Quickie Engine Installation Package is back down to 5 to 7 weeks, after having ballooned higher in January and February. We appreciate the patience of our customers.

In late February, in order to make the kit more affordable, we decided to separate the Quickie Engine Package into two separate parts; the Quickie Engine, and the Quickie Engine Installation Package. The Quickie Engine is, of course, the modified Onan industrial engine modified by Quickie Aircraft Corporation for use in the Quickie. The Quickie Engine Installation Package includes a finished propeller, Quickie engine installation plans, mounting hardware, throttle and carb heat controls, exhaust system, machine parts, miscellaneous materials, and one of the 15" x 21" color posters mentioned in the last newsletter. After April 25, 1979, the Quickie Engine Installation Package will also include the engine related instruments. The finished propeller, which QAC normally sells for \$200, is being included at no additional charge.

In the last 45 days, QAC has shipped out over 70 engines to Quickie builders who had completed their purchase of the Quickie Engine Package. The remaining engines being modified currently are sufficient in numbers to satisfy every Quickie Engine order for which we have complete payment.

We have decided on the following procedure for future engine orders:

1. Payment for the Quickie Engine is not due at time of order, but rather when the engine is ready for shipment.
2. Quickie builders who state in writing that they are ready to order a Quickie Engine will be placed on the engine list in sequential order. When their engine is ready for shipment, they will be notified to send in payment.

QAC intends to keep in stock at QAC between five and ten Quickie Engines. These engines are for Quickie Builders who have ordered an engine as detailed above, and have finished their Quickie prior to being notified that their previously ordered engine is ready for shipment. The intent here is to fully support any Quickie builder ready to fly who has ordered an engine and has previously received the Quickie Aircraft Kit and the Quickie Engine Installation Package.

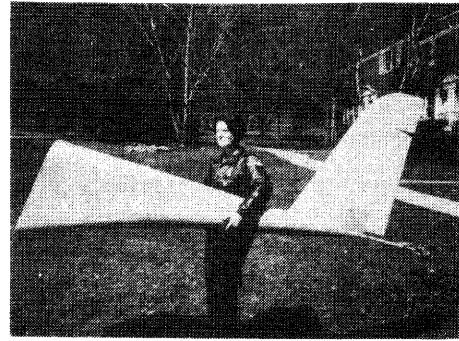
As a general guideline, new Quickie Engine orders may take 60 to 90 days to satisfy; hence, the reason that we maintain five to ten in stock at QAC.

## SEVERAL QUICKIES NEARING COMPLETION

In recent weeks, we have heard from at least 6 builders who are installing engines, finishing, and painting. Most of these individuals estimate that they will be flying in April or May.

That list gets larger nearly every week as we hear from other builders who have reached the same point of completion without ever having contacted us since they received their kit! We encourage all builders with questions or problems to call us, but it is gratifying that so many first time homebuilders can build the Quickie from the kit and plans without any communication with us. We asked one of these people why he didn't call us now and then and he replied, "Why should I call you? the plans are excellent, the kit is essentially complete, and besides, I can't be building my Quickie if I'm talking on the phone to you guys."

We have always stated that a realistic building time for the Quickie is 6 months to a year of a persons spare time; Quickie builders nearing completion have generally been building 6 to 7 months at this point.



Lee Herron says that his Quickie takes 1/3 the time to build as his VariEze! This is a picture of his aft fuselage. When this picture was taken, the remainder of the aircraft was complete except for finish and paint. (for those of you unfamiliar with the Quickie Plans, the aft fuselage is detached to make the Quickie trailerable)

There is always an exception to the rule, and in the case of the Quickie, it is Lee Herron from New Jersey. He started his Quickie on 1 January, 1979 and in late March was down to painting and finishing. He estimates that he will be flying by 20 April, 1979. That is a remarkable achievement; especially since he has a job, a wife, and since he has spent many hours showing interested visitors his project.

Another point that we have always maintained is that a Quickie builder should take his time and turn out a good product, since he will be flying his Quickie for much longer than it takes him to build it. We are pleased to see that the vast majority of Quickie builders are doing just that. Most of the parts that we have seen have had very good workmanship. One builder we know of is shooting for Oshkosh 1980 with a Quickie that he thinks will be good enough for the top Custom Aircraft award. It is interesting that he says that he thinks that our 400 hour estimate is reasonable, but that he figures by the time he finishes detailing his Quickie out for a show aircraft, that he will have probably 2000 manhours of working, and over 2000 manhours of thinking about ways to improve his Quickie.

## QUICKIE APPROVED IN CANADA

On 5 February, 1979, the Quickie was approved for construction in Canada by the MOT. We would like to thank Mr. Garry LeGare, Mr. Edward Slack, the Canadian MOT, and the Experimental Aircraft Association of Canada for working so hard on this over the last few months. Those of you familiar with Canadian homebuilt certification standards no doubt realize that most designs take years to gain approval, especially when they are departures from the normally accepted standards of performance and construction.

Until 5 February, 1979 QAC thought it to be improper to market the Quickie in Canada. Now that approval has been obtained, Mr. Garry LeGare, our Canadian Distributor, is busy selling Quickies and supporting homebuilders. He expects to have his Quickie flying by this summer. Thus far, seven Quickie kits have been sent to Mr. LeGare.

All enquiries on building a Quickie in Canada should be directed to:

Mr. Garry LeGare  
18992 32nd Ave.  
Surrey BC  
Canada V3S 4N8  
(604) 576-6638

## QAC RESEARCH AND DEVELOPMENT

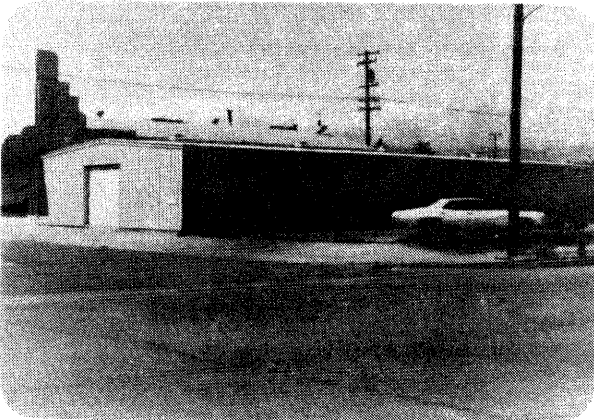
We are currently testing several powerplant modifications to determine if more horsepower can be obtained without sacrificing the outstanding reliability that we now have. These modifications are of the bolt-on variety and include a different carburetor, a tuned exhaust system, and modified cylinder heads, all of which are installed on a stock Onan engine. If successful, this development effort should result in a 23 h.p. engine with improved fuel consumption. All of these modifications could be retro-fitted to any Quickie engine already in service.

A parallel effort is being made to reduce the noise and vibration levels, even though they are currently comparable to other light aircraft like the Cessna 150 and Grumman Trainer. This effort, if successful, will also be retrofittable to any Quickie.

We expect to have completed sufficient test time by August, 1979 to make a decision on whether to make any or all of these modifications available to Quickie builders.

No further information on these developments will be released prior to further testing, so please don't ask us.

Also, in response to numerous requests, we are developing a spinner for the Quickie, and expect to test it in late April.



An outside view of our 5,000 square foot shop.

## RADIO INSTALLATION

There seems to be some misunderstanding as to what radios will work in a Quickie. This is probably due to our previous comments on hoping to test a lightweight, low cost NavCom early in 1979.

First of all, any of the normal aircraft radios can be fitted to the Quickie with no particular problems. Weights do not vary much from radio to radio. The RST NavCom being developed may have reduced cost as compared to other similar radios. A check with RST, Inc., prior to publishing this Quickie Newsletter resulted in us deciding that it will be late 1979, at the earliest, before their unit is available. Because of this, we would encourage any Quickie Builders who find good deals on existing production radios to go ahead and buy them, rather than wait on an item that is not developed yet.

RST does make a 1-6 channel Com radio if any of our builders are interested. The cost is \$199.50 for the 1 channel unit. Each additional crystal to add a channel or change frequencies is an additional \$20.00. So, a full 6 channel unit would run about \$300.00. You may be able to find a used Com with 360 channels for about the same price, so it all depends on whether you must have a new unit. The address of the company is:

Radio Systems Technology, Inc.  
RR-5 Grass Valley, Ca. 95945

See the Builder Hints section for an antenna design recommended by one of our builders.



To the right are canopy boxes, in the middle are engine installation packages and boxes holding machine and welded parts, and at the far end are Quickie engines being modified.

## INTERNATIONAL QUICKIES

Since foreign pilots are faced with the same fuel prices as the U.S. will have in 2-5 years (\$2.00 plus per gallon), it is no wonder that much interest in the Quickie has been expressed throughout the world.

Thus far, we have shipped two kits to the Netherlands, one to West Germany, and one to Scotland, in addition to the seven kits to Canada. To rent a Cessna 150 in most of these foreign countries cost at least \$30.00 per hour. That means, that unless you are rich, or use the aircraft for business, the typical citizen cannot afford to fly for sport. One of our European customers said that the Quickie was the only means by which he could afford to fly an aircraft. Gas prices in his country are over \$2.50 per gallon.

## QUICKIE FUEL CELL

Ben Dysart, one of our Quickie builders, has been looking into the possibility of having a fuel cell built for his Quickie by a race car cell manufacturer.

For those of you who are unfamiliar with what a fuel cell is, it is used on race cars to minimize the possibility of rupture and subsequent fuel leakage in the event of a crash. Usage of this item by Indianapolis racers has greatly reduced fires and injuries resulting from high speed crashes. The Air Force uses a similar technique in their fighters and bombers to minimize battle damage.

Ben says that his preliminary investigation indicates that a fuel cell built specifically for a Quickie would fit inside the current fuel tank, add a pound or two of weight, and reduce fuel capacity by about 3 to 5 percent. The price would be about \$150.00, if he can give the manufacturer an order for about 10 units.

Ben is looking for other Quickie builders who are possibly interested in a fuel cell for their aircraft, and can be reached at:

1341 Pasadena Ave  
Fillmore, Ca. 93015

We encourage builders to come up with good suggestions to improve the Quickie. We think that Ben's idea has merit; however, we have not tested the proposed fuel cell and so cannot officially recommend it. The fact that the Quickie carries very little fuel, and the fact that the Quickie's composite structure has little metal to cause sparks in the event of an accident tends to reduce the need for the fuel cell. However, for those of you who demand the ultimate in safety, the fuel cell may be a good choice. Based upon the response that Ben receives from this paragraph, he will decide whether to pursue the matter further.

## COMPOSITE MATERIALS INTRODUCTORY KIT

CAN I BUILD A COMPOSITE AIRCRAFT?  
WILL I ENJOY WORKING WITH GLASS & FOAM?  
IS MY WORKMANSHIP ADEQUATE TO BUILD A QUICKIE?  
WHAT ARE THE TECHNIQUES USED IN THE QUICKIE CONSTRUCTION?

There is now available an introductory kit to answer these questions for you. The kit consists of a book and sample materials, or the book can be purchased separately. The book, "Moldless Composite Sandwich Homebuilt Aircraft Construction," consists of 26, 11x17 pages (equal to 52 pages) describing how the material is applied, education on the materials, tools required, inspection and repair methods. Sample materials include: epoxy, microspheres, floc, peel ply, wire for hotwire saw, etc.

The book is \$14.50 and is available from us. The kit (book and materials) is \$45.50 and is also available from us. California residents please add 6% sales tax.

## QUICKIE CONSTRUCTION PLANS

At the 1978 Oshkosh, Wisconsin flyin, we had several sets of Quickie Construction Plans available for visitors to examine. In addition, individuals are welcome to visit our Mojave, California facility and to study the plans there.

However, many visitors at Oshkosh wanted the opportunity to examine the Quickie Construction Plans at length in the privacy of their own homes. This is understandable and we have decided upon the following arrangement to facilitate this: The Quickie Construction Plans are available for \$150. Purchasers of the plans will be entitled to a \$150. discount on the purchase price of the Quickie Aircraft Kit. These plans are identical to those that an individual would use to build a Quickie from our Quickie Aircraft Kit.

Chapt.	Title	Pages
1	Description/Introduction	4
2	Bill of Materials/Sources	1
3	Composite Materials Education	23
4	Miscellaneous Parts	7
5	Hot Wiring	4
6	Ailerons and Elevators	2
7	Building the Fuselage	14
8	Vertical Fin and Rudder	5
9	Building the Main Wing	14
10	Building the Canard	13
11	Wheel Pants/Wheels/Brakes	9
12	Fuel System	3
13	Mounting the Wing and Canard	3
14	Fuselage Details	6
15	Canopy	8
16	Instruments and Pitot-Static	1
17	Engine Installation	2*
18	Electrical System	1
19	Finishing/Painting	7
Appen.	Large Drawings	6

\*The remaining pages of the Engine Installation section are included only with the Quickie Engine Package.

Quickie Aircraft Corporation supports individuals building Quickie from our kits.

California residents buying the plans should add 6% state sales tax.

## QUICKIE POSTER

We have available a 15" x 21" full color poster of the Quickie suitable for framing. It is basically a reprint of the centerfold picture from the October, 1978 issue of Sport Aviation magazine. We wish to extend our gratitude to Jack Cox for allowing us to reprint it.

The picture was taken the same day that we arrived at Oshkosh, 1978, which was two days before

the flyin started. As a result, the grass is still green, and no other aircraft can be seen, even though two days later there were over 1500 aircraft there!

Copies of the poster are available to any interested party for \$5.00, including shipping and handling. California residents please add 6% tax.

## QUICKIE PROP CLOCKS

Our propeller subcontractor, Cowley Prop Shop, has started making propeller clocks. These clocks use a battery powered quartz clock (with an accuracy of 15 seconds per month) mounted in the hub of a Quickie propeller. The face of the clock can be customized to the customer's specifications; ours has Q-U-I-C-K-I-E used as the numbers and our N77Q aircraft number on the face. The price is \$49.50. More information may be obtained by contacting:

Cowley, Inc.  
Building 170, Mojave Airport  
Mojave, Ca. 93501  
(805)824-2368

Incidentally, the prop clocks are not airworthy, so don't get the idea that one can be used to power a full size Quickie!

Cowley also has three other products that Quickie builders might be interested in:

Novus No. 1 Plastic Polish  
Anti-static Dust Repellent  
UPS paid \$3.25 (8oz)

Novus No. 2 Plastic Polish  
Medium Duty Scratch Remover  
UPS paid \$4.50 (8oz)

Spraylat - A opaque film to protect canopy from scratches during construction.  
UPS paid \$8.50 (qt.)

## QUICKIE KIT PRICES

Included with this newsletter is a Sales Agreement reflecting prices effective 25 April, 1979. The overall price increase is only 3.5 percent. These increases were necessary because of across-the-board increases from vendors, some of which amounted to over 30 percent. It is expected that QAC can stabilize prices at this level at least through Oshkosh 1979.

We urge new buyers to call QAC before placing their order to obtain current estimates on deliveries, and so that we can assign them a Quickie serial number to alert us to look for their order in the mail.

## QUICKIE KIT BOX SIZES AND WEIGHT

In an effort to reduce shipping costs and increase the convenience to our customers who choose to pickup, we have repackaged the kit into the following sizes and weights:

### Quickie Aircraft Kit:

1 Box 24"x96"x12"	40 lb.
1 Box 19"x67"x47"	101 lb.
1 Box 36"x16"x20"	20 lb.
1 Box 30"x71"x14"	25 lb.

### Quickie Engine Installation Package:

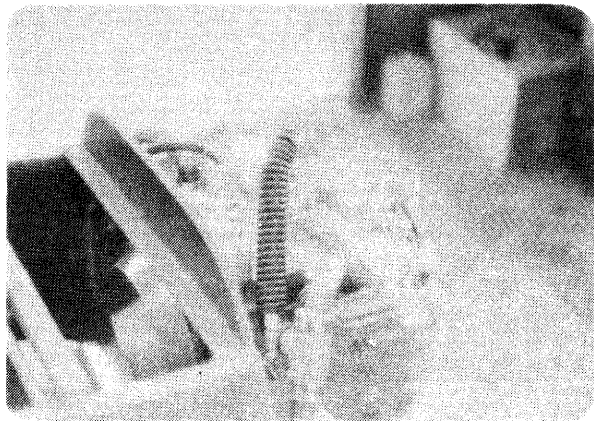
1 Box 6"x6"x48"	12 lb.
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### Quickie Engine:

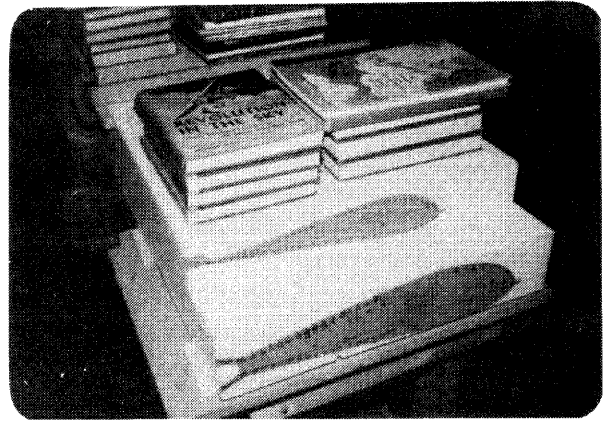
1 Box 18"x25"x21"	90 lb.
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BUILDERS TIPS

1. Epoxy Sensitivity - We have had reports back from three of our builders that they have developed a sensitivity to the epoxy. Upon further checking, it was learned that none of them had religiously used the protective gloves and hand gel recommended in the Quickie Education section. THIS IS A NO NO! Epoxy sensitivity is a cumulative effect, and constant vigilance to keep the epoxy from contacting the skin must be used. If all of the recommended safety precautions are followed, a Quickie builder should have no problems with epoxy sensitivity while building his Quickie.
2. Epoxy Developments - Our vendor on epoxy has developed a new epoxy that initial testing indicates has a very low toxicity, and is compatible with the Quickie method of construction. If further testing proves out, we expect to switch to it within about six months. Applied Plastics, Inc. has had a long history of major breakthroughs in epoxy systems; this new development may go a long way toward eliminating epoxy sensitivity problems.
3. Bending the Orange Foam - Some builders have reported considerable trouble in bending the orange foam for the fuel tank, seat-back bulkheads, etc. One of our builders tried soaking the foam first in a bathtub full of hot water, and found the task much easier. We see no problem with this providing that the builder allows the foam to completely dry before doing any glassing. Epoxy and water must not be mixed. When you think the foam is dry, leave it drying for another two days to be sure. A better method of bending the foam is to use a hand held heat gun.
4. Carb Heat Box - One of our Quickie builders, Richard Hoskins, thought that the routing of the hose from the aft end of the carb heat box to the right exhaust pipe would be better if the CH2 pipe in the carb heat box was angled about 45 degrees toward the right exhaust pipe. After examining his installation, we agree that it does provide more room around the throttle linkage area. (Reference page 17-9 of the Quickie Engine Installation plans).



5. Lee Heron suggests making a lightweight antenna by stripping 23" of shielding from one end of a coax cable; solder 3 wires 23" long to braid at base of stripped wire; push antenna wire up into vertical fin foam core prior to installation of vertical fin on fuselage, and then run ground wires to rear along leg and up each side of the fuselage.

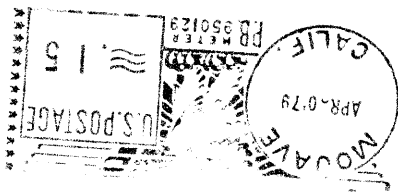
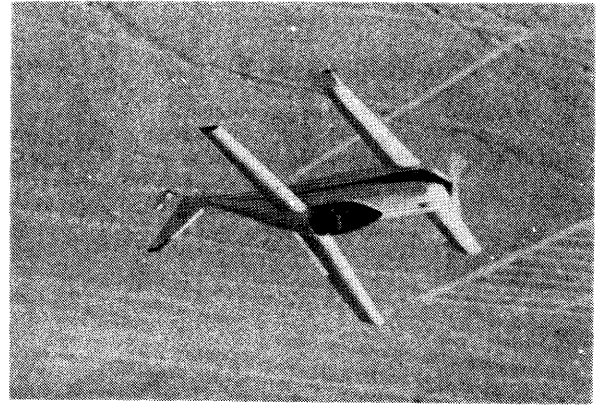


Owen Billman's (s/n 0053) foam core prior to hot-wiring

6. Warping of Foam Cores - When hotwiring foam cores, always make sure that the top of the foam billet is evenly weighted down to prevent warpage of the foam billet. Once the core has been hotwired, it may be left in the billet until needed in order to minimize additional warpage. Do not store the foam in a location exposed to direct sunlight or very high temperatures.
7. Tailspring Support - One of our builders discovered that the groove in the tailspring support could be easily accomplished in 1.5 minutes by wrapping 60 grit sandpaper around a 1/2" diameter tube (wood, metal, or tube) and sanding away.
8. Quickie Education Section - Some builders are not doing the sample pieces detailed at the end of the Quickie Education Section (bookend, stiffener, etc.) because they think it will take them too much time! We estimate that doing the samples will save the builder at least 25 man-hours and result in a much better aircraft. The samples give the builder the opportunity to experience all necessary skills in a few hours on a non-aircraft series of parts. Whenever someone reports having trouble glassing the fuselage, we ask him if he did the samples; so far all reporting problems did not do the samples. Please follow the plans in the sequence they are presented; it will minimize difficulties.

QUICKIE PLANS CHANGE NOTICES

<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>DATE</u>
QPC 27	The 3/8" O.D. x 0.062" Polyflo Tubing is not compatible with fuel and should be replaced for fuel lines with either 1/4" I.D. vinyl tubing which is shipped with all new kits, or black automotive fuel line tubing, available at most automotive parts stores.	26 Mar 1979
QPC 28	Page 17-5; The MS24693-S50 screws are replaced by AN507 1032 R10 screws	26 Mar 1979
QPC 29	Page 17-4; In order to permit greater throttle travel in the cockpit, the throttle cable and carburetor push-pull tube pivot points on the governor assembly may be switched with each other. This will require bending the carb push-pull tube to avoid interference with the carb body.	26 Mar 1979
QPC 30	Page 17-4; The washer under the head of the AN4-22A bolt must be a large diameter washer to provide even pressure on the rubber mount as you tighten the bolt up. A hardware store <i>Washer</i> is OK.	26 Mar 1979

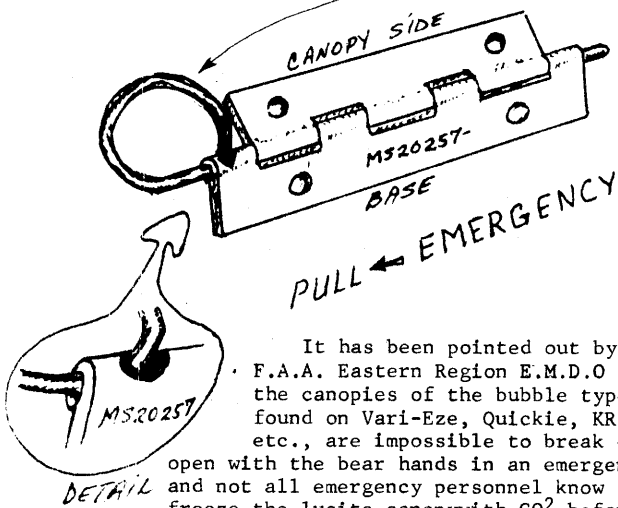


FIRST CLASS MAIL

805-824-4313  
 MOJAVE, CA 93501  
 MOJAVE AIRPORT  
 BUILDING 68  
 P. O. BOX 786



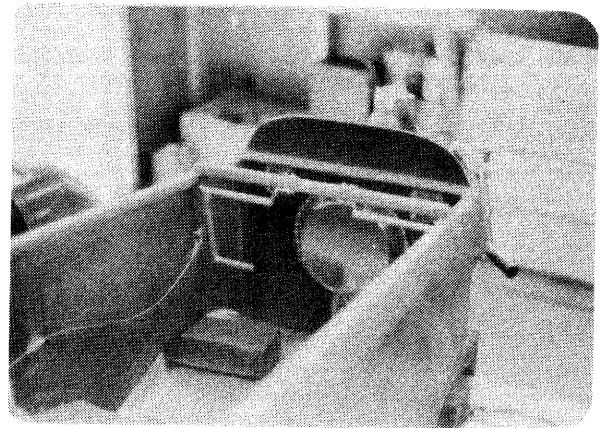
1/8" Stainless music wire from Hobby Shop



It has been pointed out by the F.A.A. Eastern Region E.M.D.O that the canopies of the bubble type found on Vari-Eze, Quickie, KR-2, etc., are impossible to break or open with the bear hands in an emergency and not all emergency personnel know to freeze the lucite canopy with CO<sup>2</sup> before it will break. Therefore, an emergency canopy opening system is desirable.

An acceptable answer was found when using MS20257 type hinge, the hinge pin is replaced with 1/8" stainless music wire that has a one inch finger loop at the front end. A 1/8" hole is then drilled into the base side of the hinge and the wire loop end snaps into this hold and locks the pin in place until pulled to release the canopy in an emergency. To finish the job, use 3/8" red "stick-on" letters along the hinge "PULL-EMERGENCY". Simple and safe.

Lee Herron  
 Designee #938



Richard Hoskins found an easy way to move the Rudder Pedals AFT by duplicating the firewall stiffener and mounting the rudder pedals from it.

#### QUICKIE FLIGHT DEMONSTRATIONS

Every Saturday at 10:00 in the morning, we put on a flight demonstration with the Quickie. This is an opportunity for all individuals interested in the Quickie to see it perform. We have flown the Quickie during these demonstrations in winds of 30-40 knots and takeoff density altitudes of over 6,000 ft.

Total time on N770 todate is over 270 hours.