

# quickie

NO. 8

QUICKIE NEWSLETTER

APRIL, 1980

## BUSY SUMMER FOR QAC

Interest in the Quickie has been skyrocketing over the last 45 days. Mail has averaged over 50 pieces per day and telephone inquiries are up over 200 percent. Informal surveys and polls taken by us indicate that rapidly rising fuel prices (\$2.28 in Denver, CO) together with unprecedented aircraft rental rates (\$30.00 per hour for a Cessna 150) have forced much of the pilot population to reevaluate their abilities to continue to fly regularly for pleasure. Pilots already fortunate enough to own an aircraft are looking for ways to reduce their costs when flying alone.

A frequent comment heard over the phone has been, "When I first saw your aircraft two years ago, I thought that it was so ugly that only a mother could love it; but every time the price of fuel rises, your aircraft gets prettier!" Likewise, one Pitts owner commented, "It's ridiculous to run 12 gallons an hour through my airplane just to go out and have fun." First time builders are looking ahead to the Quickie as an aircraft that they can afford to operate regardless of fuel availability and price in the years to come. (Just using 10% of the proposed Federal standby gasoline ration would enable an individual to fly over 5 hours per month.)

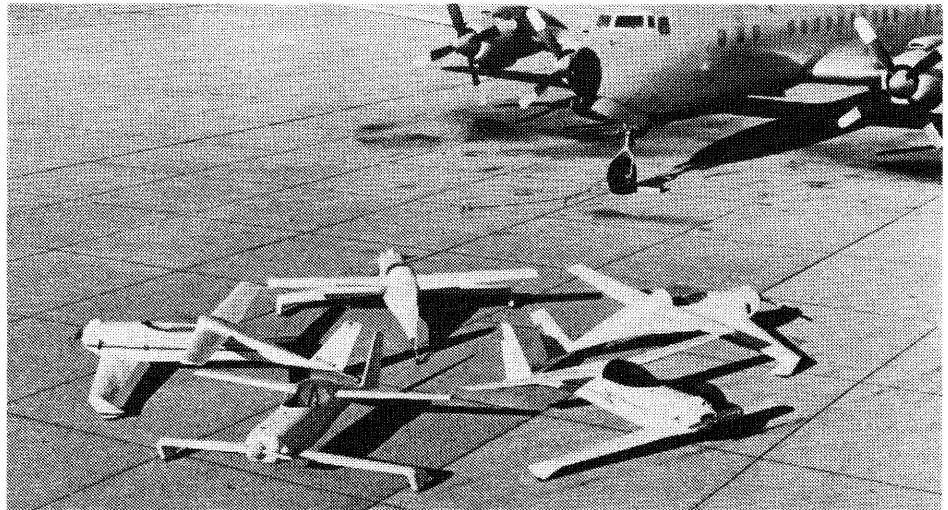
As a result, we are gearing up at QAC for a busy summer and forging ahead with our Quickie Dealership network, as well as exploring squeezing even more efficiency out of our aircraft.

The authoritative *Aviation Consumer* reports that many industry sources predict that aviation fuel prices could reach \$4.00 per gallon by the end of the year. If true, that would drive aircraft rental rates on a Cessna 150 up to over \$40.00 per hour.

Although we at Quickie are in a highly favorable position in this regard, we are not gloating. This matter is an extremely serious problem to the General Aviation industry, as indicated by the significant layoffs of personnel and the overflowing inventories. On the other hand, the evidence has been there for everyone to see for over 7 years.

## QUICKIES FLYING

As this newsletter is being written, over 30 Quickies are flying. There has been a first flight every 2.5 days on the average over the last 2 weeks. We expect over 50 flying by the end of the summer.



## SUN 'N FUN FLYIN, LAKELAND, FL

Recently, Tom took a few days off from the rainy California weather to attend the EAA sponsored flyin, down in Lakeland, Florida.

Tom Blythe, from Virginia, flew his Quickie down to the flyin on Saturday and spent the first three days showing everyone his Quickie, including flight demonstrations every day.

On Wednesday, 19 March, Tom's right main tire blew just at liftoff speed. He left the power on attempting to fly, and in the ensuing seconds he ended up veering off the runway through the weeds and coming to rest upside down with the vertical fin buried in the sand. Tom was unhurt, and his Quickie had only a broken propeller, broken canopy, and, of course, the damaged tire! No basic structure was damaged by the wild ride.

Since no Quickie pilot wants to truck his aircraft home from a flyin (it's too expensive!), we all set about to organize a Quickie workshop to repair the damage by Saturday evening. Although dozens of people lent a hand during the next 3 days, Howard Norton, Al Whitesell, Larry Kienzle, and Dick Fontaine were always around helping repair, replace, or supervise. A very special thanks needs to go to Larry, who donated all of the parts from his Quickie project to get Tom flying again.

By late Saturday afternoon, the aircraft was back on the flight line, surrounded by interested onlookers; on Sunday morning, Tom flew home!

One high official at Lakeland is reported

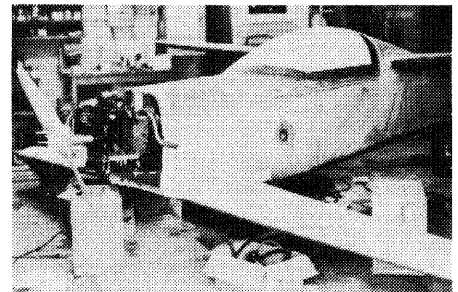
to have commented after seeing the accident scene, "If he hadn't of broken the canopy to get out in a hurry, the aircraft wouldn't have even been damaged." Tom Jewett just said that it wasn't a QAC approved maneuver.

The cause of the mishap could not be determined, although inspection revealed that the tire was flat-spotted, perhaps from a previous incident.

The Lakeland flyin confirmed the trends in public attitude that QAC has been seeing over the last two years. Thorps, Stardusters, and beautiful Steen Skybolts were hardly ever surrounded, whereas the ultralights, small single place aircraft, and the Quickie had constant crowds. Lots of horsepower is out, small engines that don't burn much fuel are in, perhaps "fueled" by the rumor that aviation fuel at Denver was over \$2.20 per gallon.

The shift in emphasis from horsepower and speed to economy and efficiency was so abrupt and far reaching, that Tom overheard one couple say after watching a pass by a 180 m.p.h. 80 h.p. single seat aircraft, "That sure is nice, but it burns *four* gallons per hour — we can't afford that."

Flying will never be the same again.



Another Quickie nearine completion.

Published quarterly (Jan, Apr, Jly, Oct) by

Quickie Aircraft Corporation  
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(805) 824-4313

Newsletter Subscription (1 yr.)*	\$6.00
Information Package (2nd edition)*	\$8.00
Pilot's Manual*	\$8.00
Quickie Construction Plans**	\$150.00
Quickie Composite Starter Kit	\$45.00

\*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 Package #1 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.

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.

## CURRENT FLIGHT TESTING AT QAC

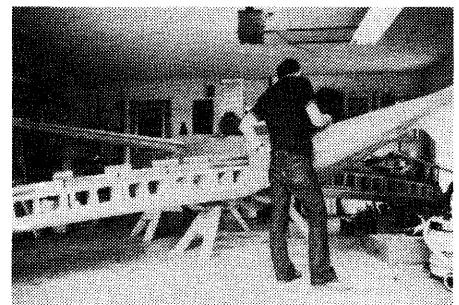
We expect to finalize the tuned exhaust system for production within 45 days. The system will add about 0.7 h.p. and will complete the 22 h.p. package.

We just recently began testing a hydraulically controlled, variable pitch propeller on our N77Q. We plan to test it for over 50 hours before making a decision on availability for our homebuilders. Our next newsletter should contain performance data; we are looking for a significant reduction in takeoff distance, and a considerable increase in the rate of climb.

During March, we flew N80QA, a Quickie that we built to capture several World and National records in both the 250 kg. and 500 kg. classes. Flight testing of the aircraft is proceeding at a slow pace, and it will probably be after Oshkosh before any record attempts are made. We have a standard fuel capacity of 30 gallons, and room for 10 more!

We should also add that any builder who desires to go after any of the current records can count on our cooperation, as we want to see the Quickie find a home in the record books.

Finally, there is one eminently qualified gentleman that we know of who would like to borrow someone's Quickie for about three months so that he can fly it around the world! If anyone is interested in working with him on this project, please contact QAC for details.



Robert Fischer's Quickie being load tested prior to first flight. This optional test will remove any doubts about the structural integrity of the finished aircraft, as well as contribute a few more gray hairs to the builder!

## BUILDER TIPS

1. In order to achieve sweepback on the canard, the foam cores must be skewed to a parallelogram shape. On page 5-3 for example, at the bottom of the page on the RT CANARD BL10-49 sketch TYP indicates that both ends of the block must be skewed by 1.2". The sketch is *not* in error when it shows a parallelogram shape to the block. TYP means that the dimension is typical at at least one more location on the drawing.
2. Please incorporate all Plan Change Notices (QPC's) into your set of plans as soon as they are received. This will save confusion, and needless phone calls to QAC.
3. When writing QAC, please include a self-addressed stamped envelope if you need a reply. If you are asking builder questions, please mark "builder question" on the outside of the envelope to speed the delivery back to you.
4. Turn to Page 11-1 of the plans; read completely the installation of the pulley in each wheel pant. Put a note on the page to verify after installation that the pulley does indeed rotate after installation and cure cycle. Next, read the rest of chapter 11. Note that if the proper sequence is followed, the 1" square piece of aluminum that the K1000-3 nutplate is riveted to is kept in place not by being bonded to the foam (if that was so, it could be dislodged with finger pressure) but by the glass lamination detailed on page 11-4 that covers the inside of the wheel pant. If that glass lamination does not cover the aluminum plate, then it will fall down into the wheel pant on the first brake application. Rattling around in the wheel pant, it could easily lodge between the pant and the tire, causing the tire to lock up.
5. For operation in snow, mud, or gravel, caution must be exercised not to pack foreign material into the wheel pant around the tire, thus increasing the rolling resistance, and, in extreme cases, causing the tire to lock up.
6. When taxiing, taking off, or landing a Quickie, the pilot's feet must remain on the rudder pedals and exert tension on the cables. We have heard of several minor groundloop incidents as a result of inexperienced taildragger pilots not maintaining tension on the rudder cables.



Gary LeGare, Quickie's Canadian distributor, picking up 9 kits last February at Mojave (Yes, it really does rain in the desert). Gary has sold over 30 Quickies in Canada, as well as just completing several construction seminars.

## QUICKIE DEALERSHIP ACTIVITY

In the last 60 days, we have received over 250 inquiries from prospective Quickie Dealers. We expect to have a basic network in place by Oshkosh, 1980, and the complete network functioning by January, 1981. Many prime areas remain open, including Los Angeles, Dallas, and Minneapolis. Any interested parties should contact QAC for complete details.

Once in place, we expect the Quickie Dealership network to provide not only increased pilot awareness of the Quickie, but also to achieve a higher level of homebuilder support.

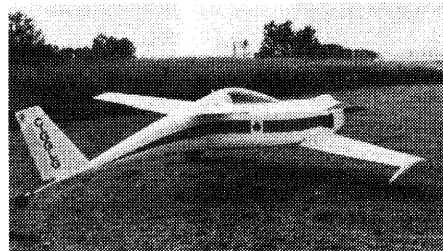
Elsewhere in this newsletter, you will find a listing of current dealers.

## Quickie Distributors

1. Canada  
Legair  
18992 32nd Ave.  
Surrey, B.C.  
Canada V3S4N8  
(604) 576-6638

## Quickie Dealers

1. Washington State  
Quickie Northwest, Inc.  
26627 Manchester Ave.  
Kent, WA 98031  
(206) 854-2543  
(206) 852-7787
2. Michigan  
Quickie Aircraft Sales of Michigan  
611 N. Main  
Plainwell, MI 49080  
(616) 685-5238



Another shot of Gary LeGare's "Big Tire" Quickie. Note the fuselage attach under the main wing which makes the Quickie trailerable.

## FOREIGN QUICKIE SALES

We are seeing a significant number of foreign sales of the Quickies. Currently, we have delivered kits to many countries in Europe, as well as Australia, New Zealand, and the Far East.

Because of the additional paper work involved, as well as the freight charges to ship a kit from Los Angeles, foreign customers should add \$100.00 to cover these costs.

## QUICKIE KIT PRICES

As indicated in our January Newsletter, there will be a price increase on the Quickie kit effective 15 May, 1980.

Since many of you will be receiving this current newsletter only days before that deadline, we will allow the following policy to assist you in purchasing a Quickie kit at the old prices: A five hundred dollar deposit (\$500.00) postmarked prior to 15 May, 1980 will secure a Quickie kit at the current prices until 1 June, 1980. If the balance due is not paid off by the 1 June, 1980 date, then the deposit will be applied toward the purchase price current at the time the balance is sent in. No deposits will be accepted after 15 May, 1980, at which time the revised price schedule will apply for new orders.

Current prices effective until 15 May, 1980 are as follows:

\$3,100.00	Quickie Aircraft Kit
550.00	Quickie Engine Installation Package
850.00	Quickie Engine

After 15 May, 1980, the packages will be restructured and the following prices will apply:

\$3,100.00	Quickie Package 1
850.00	Quickie Package 2
900.00	Quickie Package 3

All of these prices are for the standard kit and do not include the options, which are detailed and priced elsewhere in this newsletter. Also, in order to maintain a price of \$3,100.00 so that individuals could get started, we have moved some components originally in the Quickie Aircraft Kit to Quickie Package 2. Therefore the original Quickie Aircraft Kit and Quickie Package 1 are *not* the same.



*Some builders lack a garage, and are forced to use their living room, dining room and bedroom instead! I sure hope James Stoveken has an understanding landlord.*

## QUICKIE CONSTRUCTION PLANS

At the 1978 & 1979 Oshkosh, Wisconsin flyins, 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 want the opportunity to examine the Quickie Construction Plans at length in the privacy of their own homes. This is understandable and we have the following arrangement to facilitate this. The Quickie Construction Plans are available for \$150.00. Purchasers of the plans are entitled to a \$150.00 discount on the purchase price of the Quickie Aircraft Kit. The 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 Quickies from our kits.

California residents buying the plans should add 6% state tax. Foreign orders must include an additional \$12.00 for postage.

## DELIVERIES AND BACKLOGS

We are working very hard to reduce our backlog of orders and to cleanup our existing backorders. Currently, our delivery time on new kit orders is about 2 weeks. We expect that to rise to about 4 weeks by mid-May.

Also, backorders have been sent to all Quickie builders up through serial number 320. Therefore, if there are any discrepancies, please drop a note to QAC so that we can straighten things out.

## FLIGHT TESTING YOUR NEW QUICKIE

With so many Quickies making first flights these days, we think that it is appropriate to review some of the important points to remember when testing a brand-spanking-new aircraft for the first time.

Remember that you are both the manufacturer and the production flight test pilot all wrapped up into one.

First know both the Pilot's Manual and the Initial Flight Testing of Your Quickie Guide from cover to cover. You must have all of this information permanently fixed in your brain if you are going to have complete control over situations that might develop.

The first few flights should be made within gliding distance of the airport. In that way, you will be able to return promptly to an airport for a landing in case of any problems that might develop. Remember, even production Cessnas and Beech's have problems on first flights, so be prepared. For example, maybe you notice that the aircraft is right wing heavy, or that the pitch trim system is not adjustable at all speeds. Land and fix any problem rather than flying for hours with a less than perfect aircraft.

Once on the ground, make a note of all items that you found on your flight; fix every one of them before the next flight.

Be sure that you, as pilot in command, are current and capable. Too often, the homebuilder spends all of his time and energy in building, and faces the first flight without sufficient recent flight time of his own.

Frequently check all fluids and filters. Fuel filters, in particular, must be inspected after every flight, and cleaned every 2-3 hours, to prevent any residue of material in the fuel tank and lines from clogging the system.

Do a static runup of the engine before each flight. If you cannot achieve the same R.P.M. each time, don't fly until determining the cause.

An airport with long runways and lots of open spaces is ideal for the early flights. Be prepared to travel a ways to find one. Remember, there is no reason to rush into the first flight; after all, you plan on flying the aircraft for many years, don't you?

Exercise common sense, and have fun; you are joining a select group of individuals who have built and flown their very own aircraft.

Do not make the first flight with less than 10 hours of time on the engine.

New customers could assist us in smoothly filling backorders if they would inventory their kit immediately upon receipt and notify QAC in writing of all parts not there, including the ones indicated as backorders. In this way, we will have a complete record from the beginning. We normally wait 45 days from shipment of the basic kit prior to sending the remaining backorders, to give each customer an opportunity to verify the packing lists.

We are gradually cleaning up our backlog on Altimeters.

# QUICKIE CRASH WORTHINESS

Some people have questioned how the Quickie with a 250 lb. empty weight can have a strong structure that will withstand not only air loads and turbulence, but also sudden stops with the ground.

A very wise man once said that speed does not kill, only the sudden stop. A structure that will deform and crush allows time and distance for the human body to be decelerated from the impact speed to rest. The greater the distance and time, the less force the occupant will feel. This progressive failure of the structure is used in all new cars. Although we have not done crash barrier testing with the Quickie, a sandwich composite structure will deform and absorb a considerable impact load without transmitting the shock in lethal doses to the occupant.

For example, in the Quickie, a forward impact is cushioned by the presence of the engine, canard, and forward fuselage. These structures will progressively yield and collapse as they are overloaded, providing time and distance for the pilot to be decelerated to 0 forward velocity. Compare a Quickie in a forward accident to a hang glider where the pilot is sitting in the open and has no material around him to cushion the accident. As a result, hang glider accidents are much more serious than aircraft accidents of the same magnitude.

The reader is cautioned here not to confuse a sandwich composite structure where the skin takes all loads with a wood structure aircraft with foam and dynel over it to take the airloads. In case of an accident, the aerodynamic covering, not being designed for large loads, will fail rapidly and absorb little energy.

## Quickie Visits

1. "Do It Yourself Kit Show"  
Long Island, NY 16-18 May, 1980
2. "Do It Yourself Kit Show"  
Boston, MA 23-25 May, 1980

## Options

Kevlar Engine Mount — \$110.00  
Standard with 21 horsepower kit.  
Substantially reduces vibration.

Large Tire and Wheel Kit —  
\$150.00 when ordered with pkg. #1  
\$230.00 for retrofit

Very useful for those Quickie owners who standardly operate off of grass or dirt strips. Also includes improved braking system. Can be retrofit to any Quickie.

21 Horsepower Kit —  
\$200.00 with exchange cyl. heads  
\$215.00 installed at factory

Includes Kevlar engine mount and modified cylinder heads.

Communication Radio Antenna Kit —  
\$13.50

Navigation Radio Antenna Kit — \$13.50

\*\*Quickie Construction Plans — \$150.00

Quickie Composite Starter Kit — \$45.50

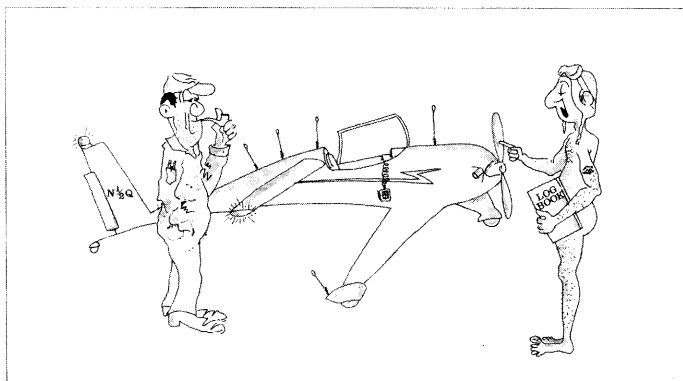
\*\*To be used with Quickie Aircraft Kit.  
Cost of plans to be credited at time of Quickie Pkg. #1 purchase.

# 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, 11 x 17 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, flox, 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. Foreign orders must include an additional \$15.00 for postage.



Since I added the NAV-COM, A.D.F., Transponder and lights it's really tough to make WEIGHT. . .



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