

# quickie

NO. 10

**QUICKIE NEWSLETTER**

OCTOBER, 1980

## **QUICKIE CONSTRUCTION SEMINAR**

The third annual Quickie Construction Seminar will be held on Saturday, 29 November, 1980 at Quickie Aircraft Corporation, Hangar 68, Mojave Airport, Mojave, California.

The seminar will be a joint venture with Rutan Aircraft Factory.

The purpose of the day is to provide an education in the building of sandwich composite aircraft such as the Quickie, Q2, and Long-Eze.

The schedule for the day is as follows:

10:00-11:00 am	Flight
	Demonstrations
11:00-12:00	Lunch
12:00-5:00 pm	Construction Seminar

Lunch will be available at a cafe approximately 200 feet from our facility. In years past we have had upwards of 500 people attend. Therefore, we ask that you notify us if you will be attending. Also, because there will be a large turnout, it would be helpful if visitors would bring their own folding chairs.

## **QUICKIES TRAVELING**

Since the July newsletter, we have made two trips across the country to both the Oshkosh and Tullahoma EAA sponsored flyins. Four Quickies attended the Oshkosh flyin including N77Q, as well as Quickies belonging to George Holmes, Garry LeGare, and Lourdes Academy. Several more were flying in the vicinity, but did not have sufficient flight time.



**Q2-STORY ON PAGE 3**

George Holmes flew to Oshkosh all the way from San Francisco, CA. By the time he returned home, his aircraft had over 370 hours total time in the hands of more than 20 pilots. George had one of the most photographed airplanes at Oshkosh because he brought along a giant windup key that he placed just over the rear wing. We heard several men telling their wives that the windup key provided a backup power source for the aircraft!

The Lourdes Academy Quickie should have its first flight by veteran Steve Wittman by the time you read this. While at Oshkosh, we were able to bring the Lourdes Academy people and Don Taylor together to discuss using their aircraft for Don to set some 500 kg. world records. Those of you who are ardent EAA's will recognize Don Taylor as the individual who flew a T-18 homebuilt around the world several years back.

He has been wanting to repeat the feat with a much lighter aircraft, which has not previously been accomplished, and has been searching for a Quickie to use for several years. If the arrangements can be worked out, several long distance flights would be made during mid 1981.

The Tullahoma EAA flyin provided the introduction of the Q2, the new two-place Quickie, which is described elsewhere in this newsletter. We had intended also to take N77Q there, having left it near Chicago following Oshkosh to save time, but weather did not permit us retrieving it in time to take it to the flyin. The new Q2 was very well received at Tullahoma, and proved to be one of the fastest aircraft in the flyby pattern. Also present at Tullahoma was a Quickie belonging to the Quickie Club of Chattanooga, flown there by Bob Clark.



W. N. Hubin and T. Brumbath of Ohio building their latest toy.

## NEW 300 KG (660 LB) RECORD CLASS COMING

We recently received word that the FAI is about to approve a new 660 lb gross weight class when the international body convenes in Australia in early 1981. This comes after two years of work by us with the NAA, National Aeronautics Association, which is the FAI affiliate in the United States.

This new class should do much to encourage development of small, lightweight, and efficient aircraft. We expect to use our second Quickie, which was built specifically for that purpose, to go after many of the new records, as soon as time permits. In the meantime, we would be glad to cooperate with any Quickie builders who would like to make some record attempts also.

### BUILDER TIPS

- SAFE-T-POX Mix Ratio**—The proper mixing ratio for Safe-T-Pox is different than for the previous RAE style. The proper ratio is on each bottle and was previously called out in Quickie Newsletter 6. Nevertheless, we continue to receive phone calls from builders who are confused. Please incorporate all changes in the back issues of the newsletters into your plans prior to beginning construction. This will eliminate errors and confusion.
- Long Term Engine Storage**—Remove the spark plugs and pour in about 2 tablespoons of engine oil. Next, turn the engine over by hand about 5 revolutions to coat the cylinders with oil. Finally, turn the crankshaft until the keyway is horizontal in order to place both pistons at top dead center.
- Engine Vibration**—There are still a few Quickie builders who have been unable to solve an abnormally high vibration level in their aircraft. First, refer to Newsletter 7 and check everything mentioned there. Other suggestions include the following: when you have changed from short spacers to longer ones, the rubbers may have taken a "set" and need to be replaced. Optimum spacer length will be when the rubbers are tight but not deformed; i.e. the rubber should not deform and bulge around the corners of the machined aluminum double cone. Also, be sure to use a washer behind the rubber on the pilot side of the firewall that is no larger than the diameter of the rubber.
- Engine Cooling**—If the engine is running hot, both the CHT and Oil Temperature gauges will read high. If the CHT reads high on climbout but the oil temperature is near normal, then the CHT gauge is probably reading incorrectly. Contact QAC if you have any problems in this area.
- Fuel Contamination**—The builder must keep a close watch on the fuel filter for any signs of contamination (trash). Install a second filter near the carburetor, using a paper element such as a Fram 6-3 or equivalent. As indicated in a previous newsletter, coat any exposed foam that sees fuel with epoxy, even if it means opening up the fuel tank.
- Weight and Balance**—Use only good scales, aircraft or platform type, to perform your final weight and balance. One Quickie owner found that his Quickie "gained" 25 pounds after he reweighed the aircraft on platform scales instead of his bathroom scales. Once again, bathroom scales are not acceptable.
- Erratic Tach Readings**—Some builders have reported erratic tach readings. The Westach units are not the most reliable tachs, but they are the only ones that we have found that will work with the Onan. Be sure to send in your warranty card to Westach. (You know, the card that fell out of the box and got lost when you took the tach out to install it.)
- Static RPM Readings**—With the standard 18 h.p. engine, the static rpm should be 2900-3000 rpm. With the high compression cylinder heads, either 21 h.p. or 22 h.p., the static rpm should be about 3100 rpm. About one builder in three needs to have us modify the propeller after installing the high performance mods because of low static rpm. Our turnaround time for this is about 5 days. In order to check your tach accuracy, QAC suggests a Heathkit Thumb Tach, which costs about \$35.00 and can be assembled in one evening. (If Gene can do it in four hours, anyone can!) This tach uses sunlight being interrupted by the revolving propeller and is calibrated with a fluorescent light which will cause the tach to read 3600 rpm.
- High Compression Head Installation**—Be sure to install the studs into the engine block tightly. Use two nuts jammed together and Loctite Brand Locknut (Blue Package) on the threads going into the engine. Do not use it on the fine threads. Be very careful to torque the nuts as shown on the installation sheet. Also, you must use the gasket sealant called out. Finally, install the "pal" nuts after running the engine several times to "heat cycle" the gaskets and then re-torquing the head nuts. Several builders have attempted to mill their heads on their own with mixed results. Please consult us before changing anything on the engine. Remember that we have hundreds of hours of experience in flying, test stand, and dyno work with the Onan. Many of the different ideas that we have tried have not worked; others have been successful. The high compression mod was originally furnished to us by Onan's engineering staff. Our testing indicated that there were long term problems with head gaskets when used as furnished by Onan. It took us over one year and 150 hours of testing to find the right combination for our application.
- Fuel Octane**—With either the 21 h.p. or the 22 h.p. engines, one must use 100/130 Avgas, 100 LL, or Premium Auto fuel. Also, we suggest using Alcor TCP additive to help remove lead deposits in the combustion chamber. TCP is available from Aircraft Spruce; a one quart kit will treat 155 gallons of 100/130 or 600 gallons of 100 LL and costs about \$10.00 with the dispenser, making it very cheap engine insurance.
- Regulator/Stator Matchup**—Some builders have noted that the regulator and stator plugs have different fittings, with one being L-shaped and the other being straight. To match the wires together, take the stator plug and remove the terminals from the plug with a small screwdriver by depressing the clips. Next, attach the wires individually onto the regulator using individual connectors.
- Referral Commissions**—Because of the current dealership network, we have discontinued the previous referral commission program.

## THE SCALED-UP QUICKIE

Some of the readership of this newsletter may have seen an aircraft called the Dragonfly that resembles a scaled up Quickie with a Volkswagen engine. It has been recently brought to our attention that the company involved, Viking Aircraft, has been making some very strong, and false, accusations about the Quickie, as well as Quickie Aircraft Corporation. This is curious since a cursory examination of their aircraft will reveal many details copied directly from the Quickie Construction Plans including aerodynamic configuration, structure, and other specific details. Apparently, they are growing tired of trying to make people believe that they did not copy the Quickie, and have chosen to lash out in frustration.

We see no point in giving them much space in our newsletter, except to say that the gentlemen in question have been put on notice by both our general attorney and patent attorney in regard to possible copyright infringement of the Quickie Construction Plans. Anyone assisting the company will face the same course of action. Quickie Aircraft Corporation was not involved in the design, development or marketing of the aircraft.

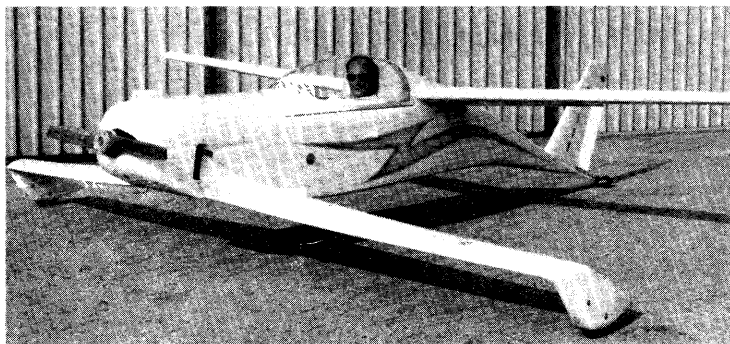
We cannot allow a company to pirate ideas protected under international law and use them for their own profit. We therefore intend to pursue this matter vigorously.

On the brighter side, they must have made a poor imitation because a first hand observation of the Dragonfly versus the Q2 recently at the Romona EAA flyin, in addition to conversation with the principals, reveals that the Q2 is 40 m.p.h. faster, climbs three times better, and is over 100 lb lighter. Scaling up an existing design is a poor second choice to optimizing a new aircraft for the intended purpose.

## QUICKIE CONSTRUCTION PLANS

At the 1978, 1979, & 1980 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



Jim Griffin and his second hand Quickie

Finally, everyone should be advised that simply because the aircraft looks like a scaled up Quickie does not guarantee that its flight characteristics and safety will be at all similar to the proven Quickie. Prospective customers will have to make their own decisions on the matter.

## QUICKIE OPTION UPDATE

We have completed testing with the basic Vari-Prop that we discussed in the last newsletter. We are currently waiting for an improved version that would duplicate a production configuration which would retail in the \$800.00 range. Assuming the next test phase goes well, deliveries would start soon after the first of the year.

Progress is continuing on the Turbo-Onan development program. Because of N77Q remaining back East at Chicago after Oshkosh, the system has not been installed on the aircraft for actual flight testing. Some test stand work has been accomplished, and we are considering bringing in an outside consultant to speed up development.

Although much of this newsletter is devoted to the Q2, we intend to continue development of the Quickie. The Q2 program means that we will have to grow further to meet the demands.

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.

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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.

## 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
3. Eastern Canada  
Stubbs AeroProducts, Inc.  
Alton, Ontario  
Canada L0N1A0  
(519) 941 1600
4. Florida  
Southeast Quickie, Inc.  
5610 Pinetree Rd.  
Pompano Beach, FL 33067  
(305) 721-9265
5. Pennsylvania  
R.F. "Bob" McFarland  
Harrisburg Seaplane Base  
333 So. Front St.  
Wormleysburg, PA 17043  
(717) 763-7654  
(717) 737-2665
6. North Carolina  
Ray Stroud  
P.O. Box 34  
Wilkesboro, NC 28697  
(919) 838-8957
7. Minnesota  
Jim Edwards  
10260 Amsden Way  
Eden Prairie, MN 55344  
(612) 941-1450

## OPTIONS FOR QUICKIE

Kevlar Engine Mount—\$110.00  
Standard with 22.5 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 operate off grass or dirt strips. Also includes improved braking system. Can be retrofitted to any Quickie.

22.5 Horsepower Kit—  
\$275.00 with exchange of cylinder heads  
and carburetor/intake manifold assembly.  
\$300.00 installed at factory.

Includes Kevlar engine mount and modified  
cylinder heads & carburetion.

Custom Upholstery Set — \$125.00 Blue.

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.

### QUICKIE KIT PRICES

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

### Q2 KIT PRICES\*

\$5200.00	Package 1
1250.00	Package 2
2895.00	Package 3

\* Special introductory price will be \$8,995.00, a savings of \$350.00. This offer will be in effect for a limited time only.



Terry L. Hall. Self portrait of an enthusiastic Quickie builder.

## FLASH! BARRACUDA EATEN BY QUICKIE

Vic Alasio of the Aeroplane Factory, Inc. in New Jersey, reports the following: "Shortly after Oshkosh, I don't know the exact date, a fully equipped, 300 h.p. Barracuda, owned and built by Jack Yoder of Midland, Michigan, was passed, yes, PASSED, by a stock, 18 h.p. Quickie approaching Barstow Airport, Midland, Michigan." This item was reported to me by a very humble Barracuda owner, Jack Yoder.

## 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.

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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 hangar 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, Saturday, at 10:00 we often give a flight demonstration.

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

### QUICKIE T-SHIRTS

Quickie Northwest has had some Quickie T-shirts designed and produced. Any other dealers or individuals who would like to purchase one or more T-shirts, should contact them directly for price and availability.



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