

QUICKIE NEWSLETTER

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Quickie Aircraft Corporation
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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 Quickie Aircraft Kit. Also, purchasers of the plans are entitled to a \$150.00 discount on the purchase price of a Quickie Aircraft Kit.

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

We are normally open from 9 to 5 on Tuesday thru Sunday, 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 required.

This second Quickie Newsletter is being sent free to everyone on our mailing list. Beginning with the next issue, only subscribers will receive this publication.



QUICKIE WINS EAA OUTSTANDING NEW DESIGN AWARD

On 4 August, 1978, the Quickie received the coveted Outstanding New Design Award from the Experimental Aircraft Association (EAA) at the annual EAA Oshkosh Wisconsin Flyin. In presenting Quickie Aircraft Corporation with the award, they stated that our pioneering of the Onan engine together with an exceptionally efficient aircraft design in order to bring the cost of ownership and the cost of flying down to an affordable level represented a significant breakthrough. Full details of the presentation will be in the October issue of Sport Aviation, the EAA's official magazine.

The awards ceremony on Friday night capped off a very exciting week for us. Other notable items that occurred during the week included: interviews on local radio and TV stations as far away as Green Bay and Milwaukee; feature articles in most of the local newspapers; flight demonstrations by several different pilots throughout the week to showoff the Quickie's unique capabilities; and even a mention of us by Paul Harvey on his national radio program.

To give you an idea of the size of the Flyin, over 350,000 people and over 1,500 homebuilt and antique aircraft showed up!

QUICKIE FLIES TO OSHKOSH, WISCONSIN FROM MOJAVE, CALIFORNIA

The Quickie is the lightest and lowest horsepower aircraft to fly to Oshkosh. As we have reiterated to visitors many times, we firmly believe that any aircraft which is not flown cross country to Oshkosh should not be offered for sale to the general public as an aircraft.

Our trip was spread over 2 1/2 days, with overnight stops in Albuquerque, New Mexico and Kansas City, Missouri. The 2025 miles was covered in about 19 hours (against the proverbial headwinds!) while averaging 65.1 miles per gallon, also a record. That means that the trip cost us about \$30 in gas and one quart of oil! The takeoff from Albuquerque was made at a density altitude of 7,000 feet. The highest altitude reached was 13,500 feet west of Gallup, New Mexico. The normal cruise altitude was 7-8,000 feet.

The trip was both routine and unevent-

ful. Our biggest problem was minimizing the time spent on the ground when we stopped for gas. Usually, we had to spend at least 30 minutes talking to the crowd that invariably gathered! In Dalhart, TX, we had to wait an additional 30 minutes so that the line girl could go home and get her camera.

For a companion aircraft, we took along a Grumman Trainer. We had originally intended to use a Cessna 150 for the flight, but found that it wouldn't keep up with the Quickie! The Grumman is about 5 knots faster than the Quickie and made a good companion aircraft.

We arrived at Oshkosh two days before the flyin started so we could relax and take a short vacation. Wishful thinking; from the time we touched down until we left, we were surrounded by people wanting to see the aircraft and ask questions.

It was not unusual during the week at Oshkosh to find a crowd four people deep surrounding both the Quickie on the flight line and our booth in the main Exhibit Building (in fact, some people complained that they couldn't find our booth!)

Gene, Tom, and Burt gave forums on the Quickie on both Monday and Friday. The crowd estimate on Monday was over 900 people. As a result, the forums ran long past the scheduled one hour.

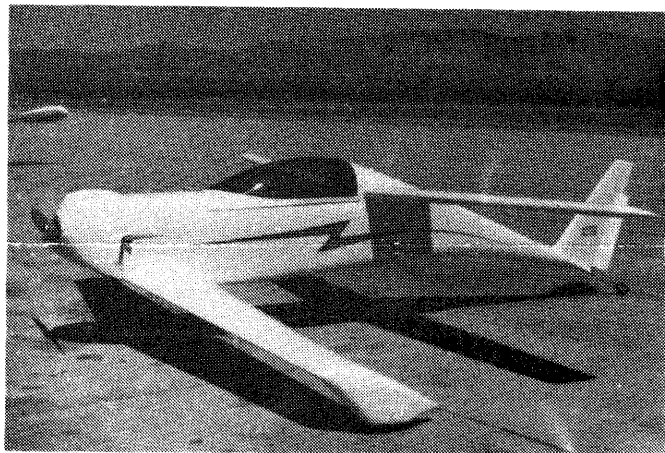
We were fortunate enough to acquire a flight demonstration slot immediately prior to the airshow on several days. Quickie flight demonstrations were flown by Tom and Burt. When traffic permitted, both flew the aircraft within a box about 3/4 mile long by 1/4 mile wide by 500 feet high to showoff the extreme maneuverability of the Quickie.

Peter Lert (pilot report in June 1978 Air Progress) flew the Quickie for a photo session with Popular Mechanics, who plan to put us on the cover sometime this year. After returning, we asked him in front of a large crowd how he liked the aircraft. His reply was, "Flying a Quickie is the most fun a person can have in public during the daytime!"

Dick Rutan flew the Quickie for a photo session with the EAA for the movie they are making about Oshkosh. Howard Levy went along to take pictures also.

The section in the back of this Newsletter entitled "ANSWERS TO FREQUENTLY ASKED QUESTIONS" was derived from our Oshkosh experience. At the end of the week, we felt like we had personally talked to every one of the over 350,000 people that attended. It took two days before our voices recovered.

A frequent comment heard at Oshkosh concerning the Quickie was, "...it would be perfect for me if only it was a two-place." A two place Quickie would be considerably more expensive and time consuming to build and maintain. We think that pilots should revise their thinking; don't buy more aircraft than you need for 75% of your flying. If most of your flying is alone, don't buy a Cherokee Six because you take your family on one two week vacation every year. Instead, rent that 'Six' for the two weeks, and fly something much more economical for the rest of the year. You will be surprised how much money you will save. An additional benefit is that a Cherokee Six is not fun to fly, but a Quickie is! With inflation and the cost of energy skyrocketing, it's time to become more practical; if most of what you want in an aircraft is an inexpensive, safe, fun-to-fly aircraft, buy a Quickie, and rent a two or four place aircraft when you need it. THINK ABOUT IT!



THE FLIGHT HOME; GRASS RUNWAY OPERATION

The trip home to Mojave, California was as uneventful as the trip East. The most important news is that we stopped at Ames, Iowa to test the Quickie off of a grass runway. We loaded the Quickie to 20 lbs over gross weight and took off at a density altitude of about 2,000 feet, and a relative humidity of about 85%. The Quickie was off the ground within 100 feet of what the Grumman Trainer required. Ames has a typical midwestern grass runway; it was rolled about two years ago, is fairly level with no large ruts, and the grass is clipped to within about three inches. Based upon our experience there, we have no hesitation in recommending the Quickie for operation off

an airport of this sort.

We also stayed over one day in Minneapolis so that some of the Onan employees would have the opportunity to see the aircraft. While there, we also appeared on a local TV show.

We made other overnight stops at Newton, Kansas (the local Ramada Inn asked us if we knew the whereabouts of a certain James R. Bede) and Albuquerque again.

After returning to Mojave, California, we spent the next few days recovering and opening the 300 pieces of mail that were waiting for us!

QUICKIE KIT DELIVERIES

Quickie kit deliveries began during the first week in July. To date, we have shipped out 48 kits. Sales are approaching the 75 mark.

We are equipped to ship out up to two kits per day, based upon a five day work week. Currently, we have a two to four week backlog, and expect that to rise as the rate of sales continues to increase.

To expedite delivery, the builder should call us for serial number assignment prior to sending his money in, and then send a cashier's check.

Many of our builders have chosen to personally pick up their kits. This is the preferred method for us also, as it assures that the builder obtains his kit without freight damage, as well as eliminating the shipping time intransit.

The price of the Quickie still remains at \$2,900 for the Quickie Aircraft Kit and \$1,050 for the Quickie Engine Package for a total of \$3,950 complete, less paint and battery.

We are often asked how long that price will remain in effect. While we are doing everything that we can to hold the price down, we have been absorbing price increases in raw materials in several areas. Depending on what happens in the next 30 days, we may be forced to raise the price in October. If this happens, we will first try to maintain the combined kit price at \$3,950 and raise the individual kit prices.

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, 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.



Robert Schreiber, s/n 0014, on the right, picks up his Quickie Aircraft Kit. Note the special trailer in the background; Mr Schreiber wind tunnel tested and built the trailer for another homebuilt aircraft that he had worked on.

QUICKIE CONSTRUCTION PLANS AVAILABLE

At Oshkosh, 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 study the plans also.

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 what an individual would use to build a Quickie from our Quickie Aircraft Kit.

<u>Chapt.</u>	<u>Title</u>	<u>Pages</u>
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.

FINANCING YOUR QUICKIE PROJECT

Many of the individuals interested in building a Quickie may not have \$3,950 to buy the complete kit at one time. There are several options available to these people.

For \$2,900, the individual can purchase the Quickie Aircraft Kit, and then obtain the Quickie Engine Package later when he is ready for the engine installation.

Most individuals with a reasonable credit rating can obtain a personal loan for the amount of a Quickie Kit from their bank or credit union.

Some may choose to form partnerships with other individuals to reduce the cost of ownership.

Finally, we are trying to put together a financing package exclusively for the Quickie. We have accomplished the preliminary groundwork but have nothing definitive yet. If you would be interested in such an arrangement, particularly California residents, please drop us a note to that effect. We will send you the details when they become available. We would like to caution you that it may be a few months before the details are worked out, and that if the customer has alternative financing available, that he should choose that route.

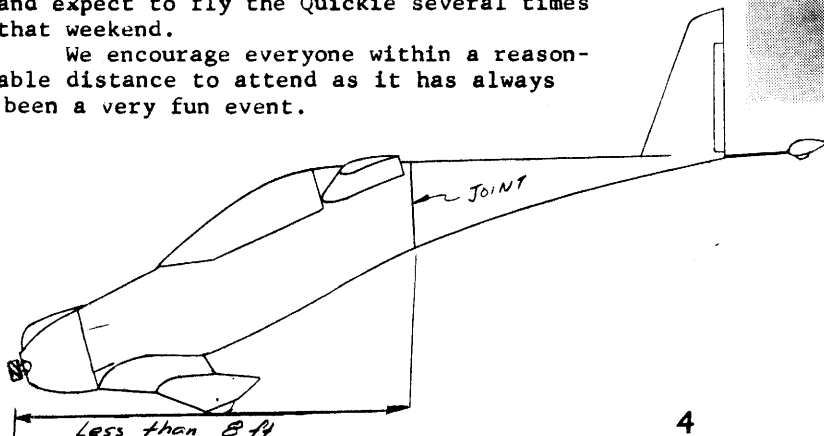
We have considered breaking down the Quickie Aircraft Kit into several separate packages, but it is simply not feasible. In addition to the fact that the price of the total kit would increase significantly because of repackaging, the main problem is that a Quickie is so "quick" to build that the builder will find himself constantly waiting for the next package to arrive so that he can continue working. For example, the basic fuselage materials could be offered as a separate package, but only 65 man-hours is required to create the basic fuselage. For some individuals, that could be as little as two weeks!

MOJAVE AIR RACES

The Mojave Air Races are scheduled for the 27-29 October 1978 at the Mojave, CA airport. Several classes of races will be held, including the big Unlimited's.

We will, of course, be available all weekend to discuss the Quickie with visitors, and expect to fly the Quickie several times that weekend.

We encourage everyone within a reasonable distance to attend as it has always been a very fun event.



THE TRAILERABLE QUICKIE

We have completed all of the necessary engineering, development, and drawings on the aft fuselage cut to make the Quickie trailerable. The drawings will be mailed out free to our builders with their Quickie Engine Packages. We estimate that the materials required will cost the builder about \$20.

There seems to be some confusion on this aft fuselage cut. The fuselage is not cut until after the aircraft is completed. Further, the basic Quickie is not obsoleted by these new drawings; you have to build the basic Quickie before you can make use of them.

This method of making the aircraft trailerable may seem unusual, but it is much simpler, lighter, and less expensive than trying to make the wings removable. Since the Quickie doesn't have a tail in the back, the loads that the joint sees are very small, making the technique much safer than making the wings removable.

For those of you who have not heard about this technique previously, it basically involves making the aft fuselage behind the main wing removable (est. weight 15 lb.) so that the distance from the prop to the joint is 8 feet. The aircraft can then be towed down the highway with the wings pointing in the direction of travel. Since the Quickie only weighs 250 lb. empty, a very light-weight trailer can be used, and the entire operation becomes a one man task. Obviously, the savings in tiedown fees or hanger rents will be considerable.



Composite aircraft are easy to modify and repair, as Gene demonstrates here by practicing for the fuselage cut (to make the Quickie trailerable.)

QUICKIE ENGINE PACKAGES

Quickie Aircraft Corporation has bought 300 engines, with deliveries spread out over the next 6 months.

Our first shipment of 100 engines will be shipped from the Onan factory on 20 October. As we mentioned in our first Newsletter, we have 10 engines in stock for anyone who is ready for the engine installation before that 20 October shipment.

On our return from Oshkosh, we flew the Quickie to Minneapolis for a day to show off the aircraft to some of the Onan Company people. It was there that we obtained some additional information on the extent that Onan is going to on quality control to assure that Quickie builders receive the best engine possible. For example, the parts that go into our engines are quarantined in a separate room. The internal parts are x-rayed and records are maintained. This means that Onan will be able to tell five years later even which connecting rod is in which serial number engine, and then pull the x-ray photo of that connecting rod from their files! Not even Lycoming does that. When we asked them why they were going to do so much trouble, they said that they were just filling their part of the bargain—the best engine they can build.

We are extremely impressed with both the attitude and the capability of the Onan Company.

GROUP DISCOUNT

Considerable interest has been received from groups of individuals who are desirous of building several Quickies together (i.e. sharing workspace, tools, and time). To encourage this activity, we will offer a \$100 discount on each kit when sold in lots of at least four. The kits must all be shipped to the same address. This method will also save the builder considerable shipping cost.

Along those same lines, if a group purchase comes as a result of one of our builder's efforts, we will refund him \$100. also.

Additionally, any trade school which wishes to build a Quickie as a class project will receive the same \$100 discount on its kit. We feel a duty to encourage the dissemination of education on composite construction. Otherwise, the trade schools will continue to teach dope and fabric techniques for years. Since the Quickie is simple to build, these trade schools with their manpower will finish Quickies in incredibly short periods of time.

QUICKIE PYLON RACING

There has been some talk recently as to creating a pylon racing class for Quickies. Not only is the aircraft very safe for racing because of the excellent low speed handling qualities, but also the course could be small enough that spectator appeal would be much greater.

QUICKIE OWNER'S MANUAL

The Quickie Owner's Manual is available now. The price is \$8.00.

Those of you who buy Quickie kits will receive one free, of course.

The Quickie Owner's Manual is similar in layout to the owner's manuals for other general aviation aircraft like the Cessna 150. Many people will wish to buy it for the detailed performance information.

UPHOLSTERY SET

We have finalized details on a custom made upholstery set for the Quickie. This package includes a seat, back, and head cushion, along with arm rest cushions and material to do the inside fuselage side panels. The cushions are completely finished and of high quality. You have your choice of blue or gold. The price is \$110. FOB Mojave, CA.

RADIO INSTALLATION

There is plenty of room on the left side of the cockpit to install a Nav-Com radio. The composite structure allows the antenna to be put inside the fuselage after the aircraft is complete. The standard electrical system makes a radio installation easy; in fact, the plans show the necessary wiring.

We are working on a complete radio package that will include a Nav-Com, antennas, and all associated hardware. We are shooting for a January, 1979 introduction.

Radio Systems Technology, Inc. is developing a lightweight, low cost (approx. \$500.) 360 channel Nav-Com unit. We have been promised one of the early prototype units for testing.

TULARE, CA FLYIN

Over the Labor day weekend, Tom attended the Tulare, CA flyin with N77Q. On Sunday, he started the day with 5.2 gallons of gas and flew 80 minutes to go from Mojave to Tulare. After making a 15 minute flight demonstration at 3:00 in the afternoon, Tom returned to Mojave with another 80 minute flight. The fuel remaining after landing in Mojave was 1.8 gallons. Nearly three hours of flying on 3.4 gallons of gas!

WORKSHOP SPACE & TOOLS REQUIRED

The Quickie can be built in the space equivalent to a single car garage. This will require hoisting completed parts up to hang from the ceiling to make room for the succeeding phases. A standard two car garage would provide plenty of room for assembly without resorting to hoisting.

Besides the tools found in most home toolboxes, the Quickie builder will need a power saw, a hand drill, sandpaper, a butcher knife, and some lumber for jiggging.

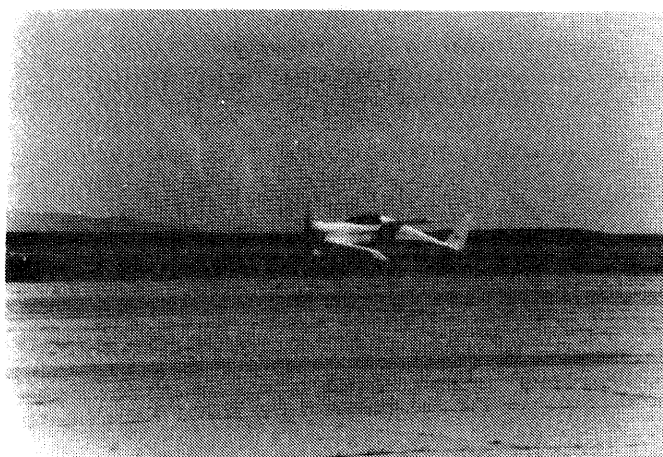
ANSWERS TO FREQUENTLY ASKED QUESTIONS

1. Does the engine have carb heat?
Carb heat is standard on the Quickie.
2. Can cabin heat be fitted?
Yes, we would suggest using the same arrangement as on the carb heat, which gives a 70 F temp rise at the carb. Also, the composite structure insulates well, and the canopy greenhouse effect coupled with body heat keeps the pilot comfortable down to about 10 F without the cabin heater.
3. What temperature does the shop have to be at for fiberglass layups?
Ideally, 65 F to 85 F.
4. How do I get my Quickie to the Airport?
 - a. Stand it on end, or
 - b. Perform the fuselage cut (see section in this newsletter on "THE TRAILERABLE QUICKIE"), or
 - c. Do final assembly at the airport. (i.e. attach wings) This will take about one week, or
 - d. Perform b. above except instead of making it portable, reattach aft fuselage permanently, or
 - e. Move to airport before start of construction.
5. What is the TBO on the engine?
We now have over 175 hours on N77Q in addition to much more time on the test stand. We have seen nothing that would indicate the engine won't go the 800-1000 hours between major overhaul that other industrial users of the engine obtain in applications like electric welders, concrete coring machines, etc.
6. Can the Quickie operate off Grass Runways?
Yes! See this newsletter's section on "THE FLIGHT HOME: GRASS RUNWAY OPERATION".
7. What are the "g" limits?
We call the Quickie a Utility category aircraft, which means 4.4g positive. The design limits on the wings are 12g plus; the canard was tested to 12g and the main wing to 6.8g with no sign of failure.
8. Is the Quickie Aerobatic?
Well, it won't spin!! It should have the same capability to loop and roll that a Cessna 150 does. Since we don't consider a C-150 to be really aerobatic, we don't call the Quickie aerobatic.
9. How big a pilot will fit in a Quickie?
Before Oshkosh, we considered 6'-5" and 210 lbs to be the limit; but then we fit a 6'-6" and 220 lb guy in who wanted a Quickie so bad that he was dieting (and already had lost 15 lb). He was comfortable enough that he ran right in to our booth and bought an aircraft!
10. Will the Continental A-65 engine fit?
Only if you want your Quickie to set on its nose in the hanger rather than fly! The A-65 is 100 lb heavier and that is out of the question.
11. How about a sawed in half VW?
We talked to Van's Aircraft, which has been developing an aircraft around that engine for three years. He states that it is not an aircraft engine yet, and will require much work, money, and tal-



Who says a Quickie only carries one person?
(Note the barely visible 400 lb of lead shot bags used for this Landing Gear Test.)
Actually, for all of you who want a two-place Quickie, we wanted to show you a picture of our six-place version under development.

- ent to become one. We concur; we have never been impressed with the VW engine for aircraft use.
12. When is the two-place going to fly?
We are not developing a two-place. Our builders deserve our full attention for at least the next year. The Quickie took three years to develop. Therefore, those of you who are holding off on building a Quickie because you hope we develop a two-place have a very long wait ahead!
 13. I've never built an aircraft before; can I build a Quickie?
We firmly believe that the Quickie is the easiest-to-build real airplane in existence. There is no reason why anyone with a basic determination and willingness to learn should not be able to complete and fly his Quickie.
 14. Is the 400 hour construction time for a professional aircraft builder?
No! It represents the average individual.



Wayne Thoms from Mechanics Illustrated magazine touches down after his flight in the Quickie.

SHIPPING SIZE

A complete Quickie kit will fit in the back of a Toyota pickup truck. We know because that is what Gene Sheehan owns!

QUICKIE AIRCRAFT KIT

SIZE	NUMBER	WEIGHT
67" x 47" x 19"	one	50 lb
96" x 25" x 12"	one	35
39" x 8" x 8"	one	20
40" x 10" x 10"	one	25
13" x 13" x 13"	two	72
14" x 11" x 11"	one	10
72" x 36" x 16"	one	25
		<u>237 lb</u>

QUICKIE ENGINE PACKAGE

SIZE	NUMBER	WEIGHT
26" x 20" x 18"	one	100 lb

Estimated Shipping Costs:

to New York City \$163.52
to Maine 180.67
to Miami, FL 167.25
to St. Louis, MO 129.88
to Seattle, WA 79.44

THE TEAM CONCEPT

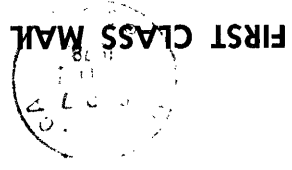
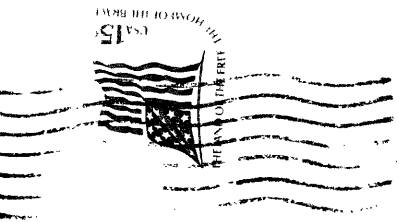
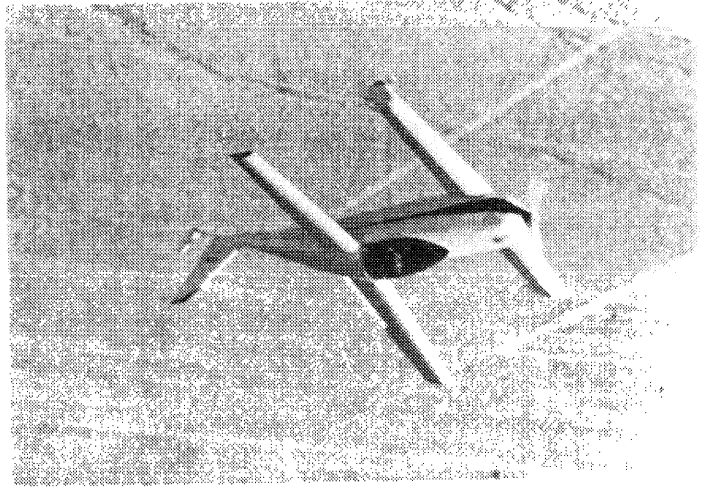
We know of several partnerships that have formed in order to build Quickies. Usually, these partnerships consist of two individuals who pool their money so that they can buy one kit immediately and get started. Later, as the money permits, they will buy a second kit so that each one will have an aircraft. By the time they get into building the second aircraft, the individuals will be so at home with the construction process that they can probably build the second aircraft in 325-350 man-hours!

The obvious question is how do you find a partner? Try friends, the local airport, the local FAA chapter (look in the phone book), and maybe even place an add in the local paper. We don't really want to get into the referral business, but if all else fails, drop us a line and we will pass your name on to any similar individuals within a reasonable distance.

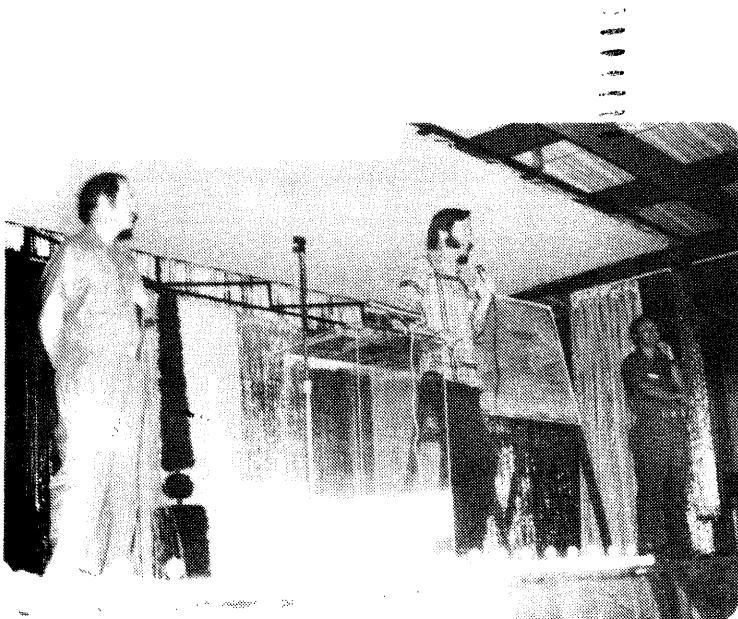
QUICKIE CONSTRUCTION PLANS CHANGE NOTICE*

NUMBER	DESCRIPTION	DATE
QPC 11	Page 5-3; VERTICAL FIN; the 3.8" dimension should be 4.8". If you have already hot-wired the section using 3.8", repair by adding a scrap piece of the blue foam to the root leading edge and carve to approximate airfoil shape to achieve the 4.8". Since root end is inside the fuselage, airfoil shape not critical.	5 Sept 1978
QPC 12	Page 9-4; BL52 wing jig template should be 0.3" less height than shown.	5 Sept 1978
QPC 13	Page 7-14; Left canopy stiffener should be made 1.2" x 30", instead of 1.2" x 25". If already made, you may splice the extra 5" on the forward edge using two BID at the joint.	5 Sept 1978
QPC 14	Page 16-1; Pitot Tube layout; to avoid confusion, let pitot tube project 2" down and 3" forward of where it exits the canard at Bl 34.	5 Sept 1978
QPC 15	Page 16-1; It may be necessary to trim the Instrument Panel so that there will be a 1/16" clearance around the circumference after the shock mounts are installed.	5 Sept 1978
QPC 16	After the ailerons, rudder, and elevators have been rigged in place so that the ends have been trimmed for clearance, glass the ends with one BID to protect the foam.	5 Sept 1978
QPC 17	Page 1-1, TABLE OF CONTENTS; Chapter 14 has 6 pages, not 7.	5 Sept 1978
QPC 18	Page 7-8; FUSELAGE SIDE Layout; STA 172.0 offset should be -0.5" rather than 0.5".	5 Sept 1978

* QPC 1 thru QPC 10 are included with each Quickie Aircraft Kit.



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Gene Sheehan, Burt Rutan, and Tom Jewett conducting a Quickie Forum at Oshkosh '78



The American Jet Hustler, a regular visitor to Mojave. Other interesting aircraft that may be found at Mojave include British jet fighters like the Vampire and Hawker Hunter, F-86's, T-33's, P-51 Mustangs, and F4U Corsairs.