

QUICKIE NEWSLETTER

No. 5

July, 1979

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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 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.

SUMMARY OF ACTIVITIES

The last three months have been extremely busy at Quickie Aircraft Corporation.

Several Quickies built by homebuilders have made first flights in the past two months. All have reported performance superior to N77Q, our Quickie prototype.

We have been working very hard to clean up our backlog of orders. To expedite future shipments, we have acquired in excess of \$100,000 in inventory.

Sixteen Quickie Construction Seminars have been completed across the United States over the past two months.

N77Q has made visits to flyins in Chino and Watsonville, California.

QUICKIES FLYING!

Since Newsletter 4, several Quickies have made first flights.

The first Quickie built by a homebuilder was flown on 21 April, 1979. The builder was Lee Herron of New Jersey. Construction took only 111 days and Lee reports that his bird is 7 m.p.h. faster than our prototype - 134 m.p.h. After initial testing, Lee reports that takeoff distance at gross weight is around 450 feet.

The second Quickie to fly was constructed by Delbert Whitehead from Indiana. Gene made a trip to Indiana to fly Delbert's Quickie. He confirms the superior performance compared to our prototype, as well as confirming how fun Quickies are to fly.

Garry LeGare, the Canadian Quickie Distributor, made his first flight in June. Garry has a good frame of reference for his aircraft's performance as he flew our Quickie last fall. Garry's initial comment to us when he phoned with the news of first flight was, "... my Quickie has much better performance than yours." He reports that takeoff distance is less than 500 feet. Tom Jewett made a visit to look at Garry's aircraft and reports that the detail work is excellent; while there, Garry showed Tom how he could disassemble the aircraft for trailering in 6 minutes with only a screwdriver!

All Quickie pilots have reported that their aircraft trimmed out well on first flight. Phone calls have been punctuated by comments like 'fantastic', 'incredible', and 'unbelievable'.

FLASH! FLASH! As we were on the way to the printer with this newsletter, we learned that J. W. Murphy of Cape Canaveral, FL has made the first flight of his Quickie.



Lee Herron makes first flight, 21 April, 1979; Essex County Airport; Fairfield, NJ.



Delbert Whitehead and his Quickie



Garry LeGare at takeoff on the first flight of his Quickie. (Garry operates out of a 2,000 foot long airport)

The empty weights reported by our builders have been consistent with our 240-245 lb figure for a basic, no frills Quickie. Both LeGare and Herron have radios, antennas, upholstery, and the trailerable feature. These items add about 10-15 pounds per aircraft. Lee's aircraft weighs 255 lb empty and Garry's is 262 lb. (Garry has a very smooth surface finish and a fire extinguisher)

Likewise, building times have also been consistent with our 400-450 manhour figures for a basic, no frills aircraft. Herron and LeGare, even with their extra options, completed their Quickies in 500-525 manhours.

Problems so far have been of a relatively minor type. We have helped to troubleshoot an electrical system problem involving a faulty component, and assisted on an engine vibration problem that turned out to be an improperly installed engine mount.

Several other Quickies are entering the flight stage as this is written, and the coming summer months should see many more.

The improved homebuilder performance being seen now is the result of QAC being conservative in all pilot's manual data. After all, one year ago you probably had trouble believing that data, didn't you?

QUICKIE CONSTRUCTION SEMINARS

We have completed 16 Quickie Construction Seminars in the last two months. We are very pleased at the great interest displayed around the country in sandwich composite construction.

The average attendance has been approximately 100 people, of which three to five are current Quickie builders. We have been fortunate that many of our builders have brought parts of their projects for display at these seminars. This has resulted not only in people being able to examine up close a homebuilt Quickie, but also in us being able to examine the quality of typical homebuilder workmanship. In general, the latter has been excellent.

We have no further seminars scheduled at this time, but we would expect to have another one in Mojave, CA around Thanksgiving. We will keep you informed through this newsletter.

We would like to thank all of the individuals who helped to make the seminars possible; in particular Bob Schreiber of Bellevue, Washington, who stepped in at the last moment to organize a seminar in Washington.

OSHKOSH 1979

We will, of course, be attending the 1979 Experimental Aircraft Association's Flyin at Oshkosh, Wisconsin on 28 July through 4 August.

Our booth number is N-7. We have a Forum scheduled for 31 July at 3:00. We will, of course, be flying 77Q when the opportunity presents itself.

It is too early to say, as this newsletter is being written, how many homebuilt Quickies will be at Oshkosh this year. We expect the number to be between three and seven. It will depend to a large extent on how many Quickie pilots finish their early flight testing and arrange to make the long trip to Wisconsin.

FIRST CANADIAN QUICKIE FLIES

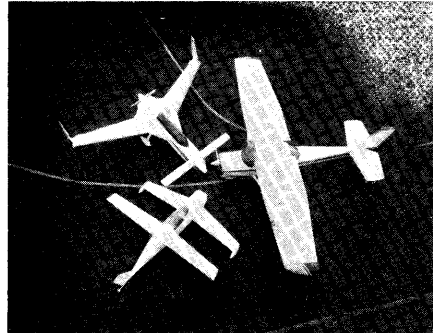
The first Canadian Quickie has been built and flown by Mr. Garry LeGare, the Quickie Canadian Distributor.

Garry, who has flown our prototype N77Q, reports that his Quickie easily outperforms N77Q in takeoff, climb, and speed.

He intends to take the aircraft around Canada this summer to demonstrate it at the various airshows and aviation meetings. He also plans to attend Oshkosh for the first few days of the show.

For further information on the Canadian Tour, or for information on building a Quickie in Canada, please contact:

Mr. Garry LeGare
Leg-Air
18992 32nd Ave.
Surrey B.C.
Canada
(604) 576-6638



The Lee Herron Menagerie

UPDATE REPORT ON N77Q

N77Q, the Quickie prototype, now has over 330 hours of flying time. Total operating costs, including gas, oil, maintenance, and insurance are \$3.20 per hour. Airframe and engine maintenance has been confined to replacing the main tires once and the plugs and oil regularly.

N77Q has made recent visits to the Chino and Watsonville, California flyins.

GUIDE FOR QUICKIE PILOTS

We have prepared an "Initial Flight Testing of Your Quickie" guide. This publication is intended to bridge the time period between completion of your Quickie and the conclusion of your initial first flights. It has been sent free to all Quickie builders.

Topics covered include weight & balance, inspections, procedures, and recommendations for first flight.

QUICKIE SALES AND DELIVERIES

We have been working very hard over the last three months to clean up backorders and to acquire a substantial inventory of the prefabricated components.

Several items that were in short supply over the last three months, such as the UNI, wheels, and altimeters, have been coming in at a much faster pace. Our goal is to have all current backorders cleared out by late July.

Most of the prefabricated parts are now in stock at QAC as part of our over \$100,000 inventory of Quickie components.

Additionally, we currently have in stock approximately 30 engines beyond the number of current orders. As a result, we have returned to a first-come first-served basis for engine deliveries. By 10 July, we expect to have shipped out engines to all Quickie customers who have paid for an engine.

Basically, our goal is to have the backlog on the Quickie Aircraft Kit at less than three weeks by 1 August. The prefabricated components and engines will be in stock for immediate delivery at that time. The only unknown is the number of orders that will result from Oshkosh 1979, which

will have an appreciable effect on the backlogs after September. We will do everything possible to minimize those backlogs.

In general, we expect our second year of production to be much smoother than the previous one.

CURIOSITY DEPARTMENT

Recently, the Wall Street Journal, that prestigious reporter on the business community, featured General Aviation on its front page. You may be interested in what they had to say:

"The manufacturers concede there has been a slowdown in sales of their smaller planes, the type used mostly by pleasure fliers rather than businessmen. But they say it's too soon to say whether this is due to high prices (\$20,000 and up) and rising fuel costs (nearing \$1 a gallon in some areas), or to a normal wintertime sales slump.

Cessna says 80% of its planes are used mainly by businesses. 'There aren't that many people any more who just go out to bore holes in the sky', says a spokesman."

With an attitude like that, is it any wonder that one has to build one's own aircraft to be able to afford to fly?

REPLACEMENT ENGINE PARTS

Several builders have asked about replacement parts for their Quickie engines. The Quickie Owner's Manual gives data for spark plugs and other common parts. Any internal engine parts may be obtained from the local Onan dealer. This is true also for engine manuals. Onan has a vast dealer network around the world, and no builder should be further than 40 miles from a dealer.

Some builders have expressed a desire to obtain another engine for a backup, and to protect themselves against future price increases. Since we currently have engines in stock and are selling them on a first come-first served basis, we would be happy to oblige.

REVIEW OF FIRST YEAR OF QUICKIE SALES

June, 1979 was the first anniversary of the beginning of Quickie sales, even though the project development and flight testing goes back over 4 years.

We think that it is appropriate to review the results and talk about the future.

The first year of production saw four home-built Quickies fly. These aircraft have universally seen better performance than our Pilot's Manual data. This is what we have expected, since we were conservative in our estimates and realized that there were many skeptics out there looking for anything to complain about.

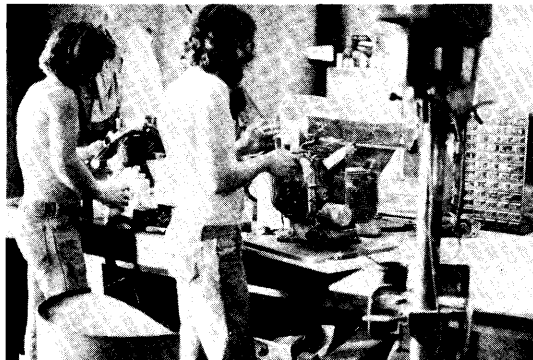
We have seen Quickies with radios, Quickies made trailerable, etc. The building time for a fully optioned Quickie has been as low as 500 man-hours; this substantiates the 400 manhour figure that we give for a basic aircraft with no frills. The empty weights have been consistent with the 240-245 lb empty weight that we give for a basic aircraft.

Quickie Pilots universally report that they have a very fun aircraft to fly. When they total up their operating costs after a few months, they will have a further reason to be happy.

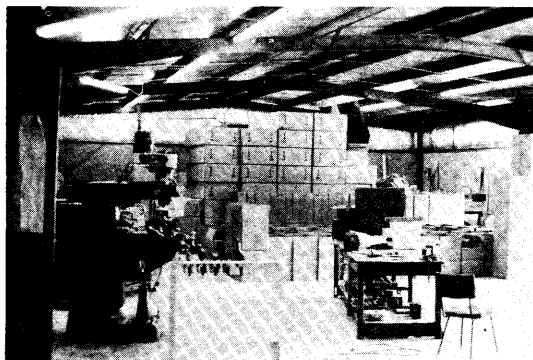
In the coming months, those of you who have been skeptics on performance, on ease-of-construction, and on safety will see many examples to alleviate your concerns.

The next year should be a very satisfying time for those of us at Quickie Aircraft Corporation. Production has smoothed out, there will be a large inventory to work from, builders are flying and testifying to our statements on performance, safety, and construction ease, and we can be justifiably proud of our accomplishments over the past four years. We hope that we have shown people that big is not necessarily better, and that even

though you cannot buy a 60 mile-per-gallon auto, you can buy a 100 mile-per-gallon aircraft for less than the cost of a new car. We think that the Quickie is a proper application of advanced technology, and we plan to continue our efforts to promote efficient, sensible transportation and fun.



Above - Busily modifying engines
Below - Part of our inventory



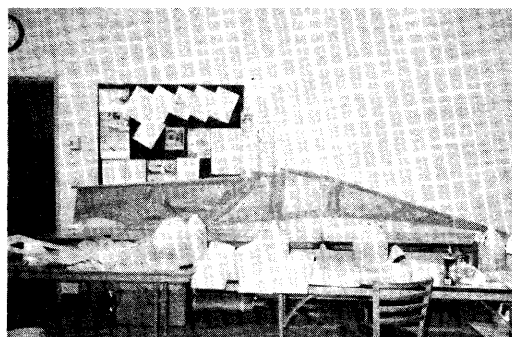
THE QUICKIE AS A SCHOOL PROJECT

Lourdes Academy, Oshkosh, Wisconsin is nearing completion on a Class Quickie project. They expect to have the aircraft at Oshkosh.

We understand that none other than Steve Wittman has agreed to do the first test flights.

This is a fine example of far-sightedness on the part of a school. Reports indicate that the students like the idea of working on a project which promises to have considerable usefulness once it is completed.

We wish them well on this, and future projects.



Beginnings of an aircraft - Lourdes Academy

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.

| <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 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.



We always make use of the latest technical publication when designing and building aircraft!

QUICKIE FIRST FLIGHT PHILOSOPHY

Every Quickie builder has received a copy of the "Initial Flight Testing of Your Quickie" publication.

In addition, we would like to caution builders who are beginning the flight phase to make use of our knowledge and services to solve any bugs that crop up. For example, if something doesn't work the way you think that it should, call us and ask about it. If you have checked and rechecked to verify an installation is as per the plans, and you still don't think that it is right, call us before launching off and changing 10 different items. It is so much easier when you adopt a planned, professional approach to problem solving rather than the helter-skelter approach. As an example, one builder cut off the external counterbalance on the prop flange because he decided on his own that it wasn't necessary. If he had called first, we could have told him that the counterbalance is very important to vibration control, and that it required three months of development on our part to optimize.

Finally, by communicating to us the results of your flying, we can help others who are nearing that stage to safely fly their Quickies. Also, our knowledge and experience can help to 'fine-tune' your aircraft's performance. As an example of the latter, Lee Herron found that one change made on our recommendation resulted in a 50% reduction in takeoff distance.

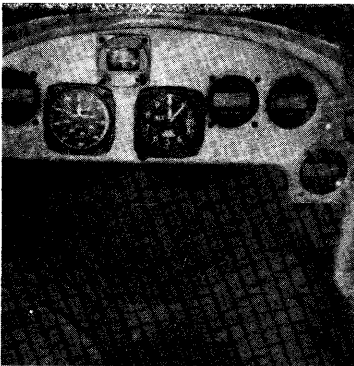
NEW FAI CLASS?

Quickie Aircraft Corporation has petitioned the National Aeronautics Association (NAA), which is the U.S. arm of the FAI for international record certification, to create a new international weight class of 250 kg. (550 lb). The current minimum weight class goes from 0 - 1102 lb. We think that it is time to encourage development of light-weight, efficient aircraft. In the past, a very good way to accomplish this goal has been through competition in various categories (e.g. speed, distance, altitude).

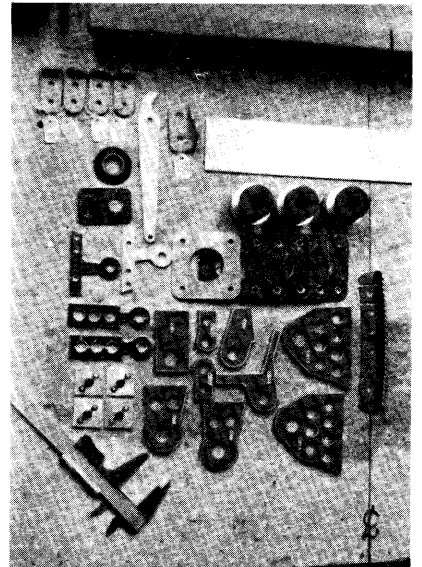
The matter will be taken up during the next international meeting. In the meantime, the NAA has promised to consider the matter of a 0 - 550 pound U.S. class in the near future.

BUILDER TIPS

1. Bending the Orange Foam - The Quickie team of Al Mullan and Ron Corley report that a small camp stove works well if you keep the foam moving to avoid hot spots.
2. Instrument Panel - Quickie builder Doug Swanningson, who should be flying by the time this newsletter is mailed, sent us the picture below of his panel layout. Note the several digital readout engine instruments.
3. Pitot Tube Installation - Several builders have asked if it is OK to install the pitot tube prior to glassing the bottom skin on the canard. This avoids having to grind through the glass skin later. We agree that this procedure works well.
4. Tailwheel Travel - Due to an accumulation of tolerances in the making of the tailwheel assembly parts, a Quickie builder may find that he cannot get sufficient deflection left and right initially. To cure this, wait until the rudder system is hooked up and functioning; then using the rudder deflection template, file the rudder stops on QTW3 to obtain the 30 deg rudder travel called out. If necessary, you may also file the QTW2 fork to a maximum of 1/32 inch to obtain the 30 deg.
5. Arm Rest/Aileron Tube Interference - About 1/3 of the Quickie builders have noted that the Aileron Tube interfered with the right arm rest at the seatback bulkhead. This is most probably due to an accumulation of tolerances during the assembly process. To correct, modify the right arm rest contour inboard so that the tube clears. If necessary you can glass a bump on the inside arm rest.
6. Pages 4-5 and 4-6 - Several builders have correctly noted that the red PVC foam included with the kit is not as thick as the pieces to be made need to be. The intention was to use scrap orange foam to build up the thickness where needed. Because the pieces taper in thickness, only a small piece of orange foam is needed. This also makes it easier to sand when installed on the aircraft.
7. Torque Limits on Prop and Axles - Prop bolts should be tightened to about 75 in-lb unless the wood yields first. Axles bolts should be tightened to about 25 in-lb.
8. Quickie Plans Change - abbreviated QPC; These plans changes begin with QPC 1 and continue on, with any recent changes indicated through the Quickie Newsletter. If your QPC's do not go all the way back to QPC 1, contact QAC for copies.
9. Machined & Welded Parts - Some of the pre-fabricated components shipped are not cad-plated in an effort to maintain kit prices. They should be zinc-chromated by the homebuilder before installation. They do get shipped with a coat of oil to protect them in transit.
10. Regulator Grounding - The regulator should be grounded before running the engine.
11. Inventory - After receiving your Quickie Kit, please perform a careful inventory of parts received against the shipping lists. Notify QAC of any discrepancies.



Robert McFarland nearing completion



Some examples of excellent workmanship by Quickie builder Al Thompson

VARIABLE VOLTAGE SUPPLY FOR HOTWIRING

We like to use this newsletter to spotlight developments that may be of interest to Quickie builders.

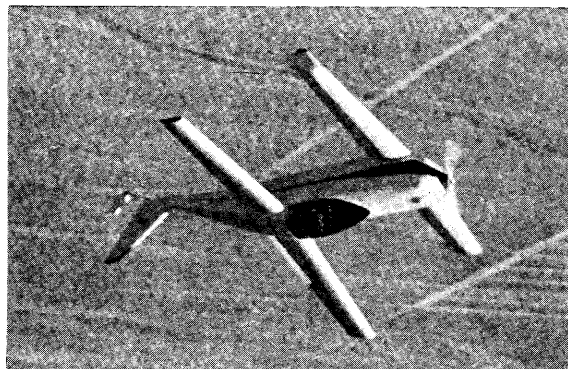
John Watkins and Stephen Mowry, a pair of Quickie builders from Minnesota, have developed a fine little Hot Wire power supply kit. We have tested the device in our shop and found it to be very good, as well as less expensive than other units that are available.

A brief description follows:

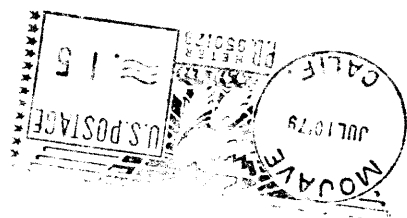
HOT WIRE power supply kit; 0-24 volts, 3 amp, complete kit includes transformer, variable voltage control, 10 feet of 24 gauge nichrome wire, case, mounting hardware, fuse, fuse holder, and instructions.

The cost is \$19.95 postpaid from:

Lighting Systems, Inc.
1678 Hewitt
St. Paul, MN 55104



FIRST CLASS MAIL



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



COMPONENT WEIGHTS

In Quickie Newsletter 4, we asked builders to report on weights for their finished components so that we could tabulate them and present them in a later issue.

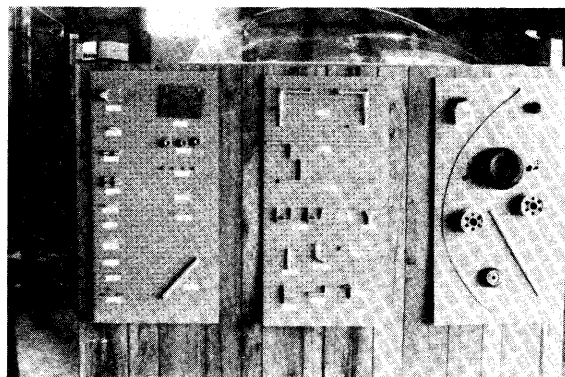
The following weights are the averages derived from the responses to date:

- 54.5 lb. Canard complete with control system, wheel pants, wheels, tires, and brakes.
- 30.0 lb. Main wing complete with control system.
- 43.0 lb. Basic fuselage complete with all bulkheads, fuel tank, and side consoles.
- 88.0 lb. Engine, prop, all baffles, hoses, motor mount plate and mounts.
- 17.5 lb. Aft fuselage after fuselage cut, includes fin, rudder, tailwheel, etc.

As we receive more detailed component weight breakdowns, these will be tabulated and presented also.

LATE NEWS

1. On 27 June, 1979 the government of Norway approved the Quickie for construction in that country.
2. Please, send only black and white pictures to QAC. Color pictures do not reproduce well for the newsletter.



These are some of the prefabricated parts that are standard with a Quickie kit, including welded parts, machined parts, and the canopy.



Garry LeGare being interviewed on Canadian TV following the first flight of his Quickie.