

quickie

NO. 22

QUICKIE NEWSLETTER

WINTER 1984

Q2-TURBO APPROVED

An extensive test program has been conducted since Oshkosh by Revmaster and Eric Schilling on both the Maloof prop and Turbo installation. Eric has written an article for "Sport Aviation" but we don't know which issue it will appear in as yet. "Homebuilt Aircraft" will feature the Turbo in the July issue. There is a nice article in the April 1984 issue of "VW & Porsche" covering the Turbo & Revmaster's background.

Some changes to the fuel system are necessary with the Turbo due to the extremely high deck angle that can be obtained during climb. We have also found that the air induction system needs modification. Cowling, spinners, and other components are not complete but all these details should be resolved in the next 90 days. Contact QAC for availability and pricing information.

NEW HEADS FOR Q2

During testing on the Turbo, Revmaster dynoed some new cylinder heads with larger ports and valves. These combined with a different lower induction pipe showed about a 10 horsepower increase on a stock Revmaster engine. We have installed this configuration on Scott Swing's Q2 at Mojave, and will conduct a test program as quickly as possible. These new heads incorporate all of the features in valve and seat material developed for the Turbo. This is an easy change which will narrow the performance difference between the Q2 and Q-200.

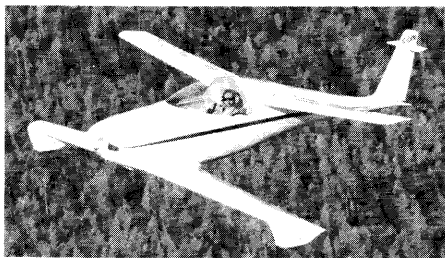
Q-200 PILOT REPORTS

The March issues of "Homebuilt Aircraft" and "Air Progress" feature pireps on the Q-200, N81QA. Bill Cox's article in "Homebuilt" is particularly informative as he flew in rain and gusting crosswinds. We are having both of these articles reprinted. If any of you can't find the magazines and want a copy of the articles, we should have them in a few days. No charge, of course, but please send a self addressed, stamped envelope. The March issue of "Sport Aviation" has a cover article on the Q-200. We are also featured in an upcoming Kit Plane Special by "Private Pilot" and in several non aircraft magazines: March "Discover" and "Singles Magazine."

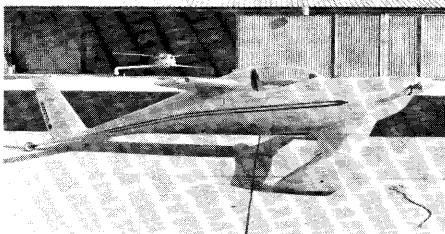


Q2 TURBO SPECIFICATIONS

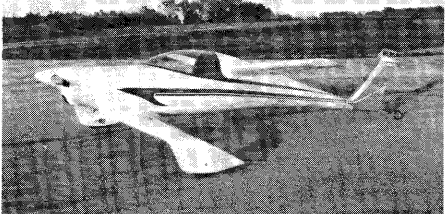
Empty Weight	535 lbs.
Gross Weight	1100 lbs.
Useful Load	565 lbs.
Takeoff Distance	525 ft.
Landing Distance	950 ft.
Rate of Climb @ 900 lbs. Gross (SL)	1500 FPM
Rate of Climb @ 12,000 ft.	1200 FPM
Maximum Horsepower @ 3200 rpm and 36" manifold pressure	75 HP
Maximum Speed	215 MPH
MPG @ 75% Cruise	45 MPG
MPG @ Economy Cruise	60 MPG
Service Ceiling	30,000 ft.



Ken Olson of Golden, British Columbia.



Ron Whetsten's Q2. Too bad you can't see this in color. Ron's Q2 is bright yellow with red detail and red crushed velvet interior. If you look close, in the hangar in the background is James Largley's Q2.



Harvey Sorensen completed his Q2 in March 1983 and had his first flight in July 1983. Nice Q2, by the looks of the photo Harvey plans on winning the cash at Oshkosh for best Q2.

Q2/Q-200 NEWS

Q2 PACKAGING

It is important for builders to inventory the contents of all shipments within 30 days — from receipt — and to report all backorders and discrepancies to QAC in writing immediately.

As of April 1, 1982, Q2 Package 1 was broken down into two smaller packages, called Package 1A and Package 1B. The price breakdown will be as follows:

\$3895.00	Package 1A
3055.00	Package 1B
1850.00	Package 2
3395.00	Package 3

A builder electing to purchase Package 1A and Package 1B and Package 2 together will save \$300.00 at the \$8500.00 combined price. The price for a complete kit purchased in the most economical manner is \$11,895.00 complete.

Package 1A includes materials to construct the basic fuselage, bulkheads, consoles, etc., and pre-mounted canopy. Package 1B includes the remaining materials to fabricate essentially the remainder of the airframe. Package 2 is an engine installation, instrument, and miscellaneous materials package. Package 3 is the Revmaster 2100-DQ engine.

All packing of Package 1A will be done at QAC; we presently have Package 1A in stock and ready for immediate delivery.

Backlogs on the other packages, except the engine, is 30 days. Orders on the Revmaster 2100-DQ engine will be filled in 60-90 days.

Many dealers have complete Q2 Kits in stock, please call your local dealer for availability.

Available options for the Revmaster 2100-DQ engine include:

- \$280.00 Geared Electric Starter.
- 78.00 Oil Filter System.
- 32.00 Oil Sump Drain Assembly.
- 325.00 Vacuum Pump System.

Further options available include:

- \$125.00 Forward Hinge Canopy
- 225.00 Cabin ventilation/
Heat package
- 80.00 Parking Brake option for the hydraulic disc brakes.
- \$350.00 Custom Upholstery Set in Blue.
- 175.00 Prefabricated Fuel Tank.
- 81.00 500 x 5 tires exchange
(\$95.00 outright).
- 150.00 Retrofit Aileron Reflexer.
- 235.00 Pre-fabricated Bulkheads.
- 720.00 Carbon Fiber Spar Kit.
(Standard on all new kits.)
- 135.00 Pitch Control parts for old canard

Q2 builders should verify that they have the correct plans and updates. With either Package 1 or Package 1A, the builder should have Chapters 1-14, a Table of Contents, Appendix Sheets 1-5, Q2 Pilots Manual, Quickie Newsletters from 10 forward, and plans addendum sheets ii thru vii. The plans for installation of the hydraulic disc brakes are on addendum sheets viii thru xii. With Package 2, the builder should have Chapters 15-20 and Appendix Sheet 6. Each non-engine option has an installation sheet that comes with it. Please drop Debbie, at QAC, a note if you don't have everything. QAC strongly recommends that all plans changes and builder tips be inserted into the builder's plans immediately upon receipt, so as to avoid errors. Builder tips are numbered as QBT _____ and the Plans Change Notices are numbered as A — QPC _____, with the highest number being the most recent tip or change notice.

Q-200 PROPELLERS

The following firms have submitted props for testing and have been approved by QAC.

Sensenich:

Attn: John Benjamin
973 Nissley Rd.
Lancaster, PA 17601
717-898-8586

Ted's Props:

Attn: Ted Hendrickson
9917 Airport Wy.
Snohomish, WA 98290
206-568-6792

Warnke Props:

Attn: Bernard J. Warnke
c/o Eloy Airport
Eloy, AZ 85231
602-466-9441

Props Inc.

Attn: K. P. Rice
2020 S. Susan, Unit 0
Santa Ana, CA 92704
714-545-3575

Please contact these firms directly for pricing, availability and features such as leading edge protection.

Q-200 KIT PRICES

The Q-200 Kit is now available. Package 1A contains the material to construct the fuselage, pre-mounted canopy and raw materials. Package 1B consists of wheels, tires, brakes, welded components, machined parts and other prefabricated parts to fabricate essentially the remainder of the airframe. Package 2 is the Continental 0-200 engine installation package. The prices are as follows:

\$3895.00	Package 1A
3055.00	Package 1B
2900.00	Package 2

A builder electing to purchase the complete Q-200 kit all at one time will save \$400.00 with a \$9450.00 combined price.

Q-200 RETRO PACKAGE

This package includes the components required to convert from a Q2 Package 2 to a Q-200 Package 2. It consists of: Continental mounting hardware, spinner kit, carb heat transfer valve, 5" propellor extension, prop washer, cowling, oil separator (a must), stainless steel carb heat muff, patented AR exhaust system, fiberglass inlet air and carburetor adapter pieces, elevator and aileron counterbalance arms, engine mounts, fuel pump, sheet metal baffling kit, liquid firewall, and appropriate hardware.

QAC is continuing our credit policy for returned Q2 components. See NL #20 or contact QAC for details.

AILERON REFLEXER

The Aileron Reflexer is now approved for the new canard. While the Reflexer was developed to help eliminate rain and bug trim effects on the old GU canard, it has proven to be useful with the LS(1) 0417 Mod canard. With the Reflexer you can change the aircraft's approach deck angle and on roll out, you can flip them full up and really get on the binders for stopping. Remember that this is a very powerful control and you should explore its use cautiously.

NEW CANARD

Over 100 people responded to the price increase in December bringing the total to over 350 and swamping us again. We are just now catching up on these orders and hope to be completely current in 30 days or less. About 4 builders are flying with the new canard at present. We will be testing some adjustable "Sparrow strainers" at QAC in the near future. This might allow an electric elevator trim system for both pitch and roll controlled from a thumb switch on the stick!

Q2/Q-200 PLANS CHANGE

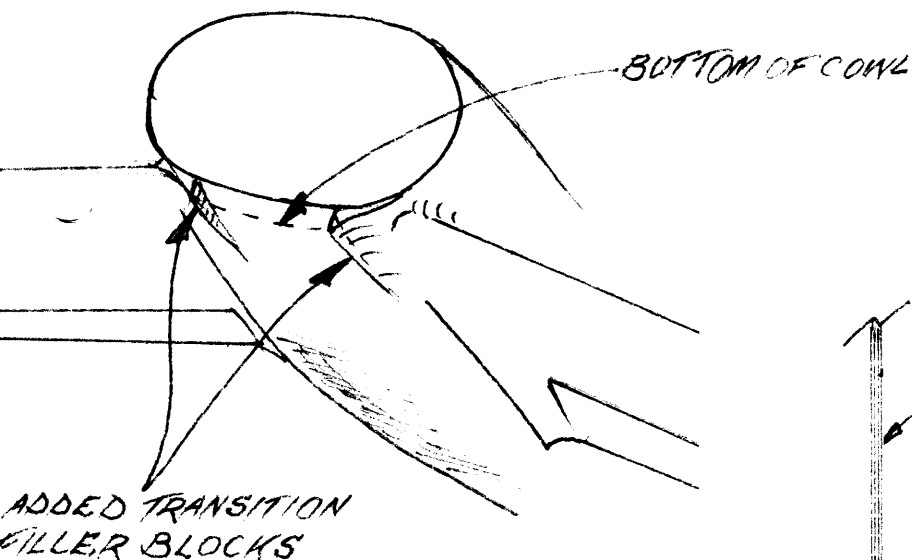
NUMBER: Q2PC28

Fuselage reinforcement — a couple of Q2's have nosed over and when they fell back on their tailwheels, fractured the fuselage in front of the vertical fin. This resulted in a major repair instead of a minor one. We have changed the lamination schedule on the upper rear fuselage shell to include a 5" wide unidirectional tape extending from the vertical fin area forward about 40". This reinforcement can be added to the inside or outside skin. As this change is not needed for the normal operation of the aircraft it is not mandatory.

NUMBER: Q2PC29

Note: Appendix sheet #3 shows long notch at bottom of firewall. Do not notch. Add foam blocks both sides to create ramp for air exit and fairing to canard. Cover with 2 plys BID at 45°.

This allows more effective air exit around Continental oil tank.



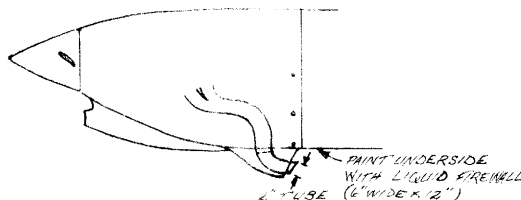
NUMBER: Q2PC30

Page 7-1 plans: Top view of vertical stab should measure 20.6" rather than 23.5"

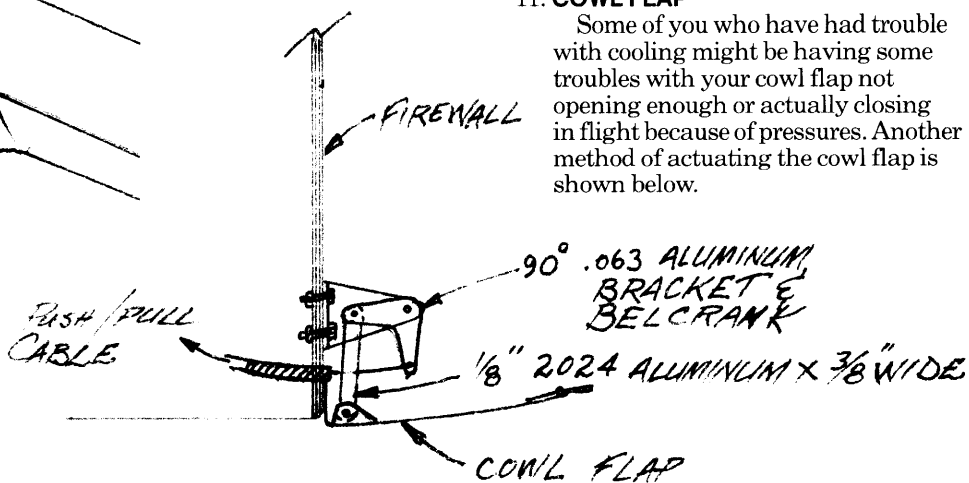
Q2/Q-200 BUILDER TIPS

1. Carbon spars for the LS-1 mod canard have virtually eliminated the need for postcure. The new canard is easier to build than the GU and by eliminating postcure, we should be able to publish a new time-to-build.
2. Plan ahead when building the new canard by carving enough foam away from the apex to allow about 3/4" between bottom of magneto box and top of canard for dual rudder option before glassing canard.

3. Some have had problems with impulse couple hanging up on the Revmaster engine. Solution: Pull mag. every 150 hrs. and lube impulse couple.
4. The Q-200 exhaust is manufactured with the exit pointing down. This is the easiest and safest approach considering fire hazard and noise. You may want to point it aft however, for increased performance as we have done on our prototype. A 90° elbow from your muffler shop, hacksaw, and gas welding rig will do the trick. You may want to build a ramp enclosure to your cowl before finish mode (3 ply BID allowing 1/2" all around exhaust and paint area liberally with liquid firewall).



Also, allow minimum 1.7" clearance at bottom of fuselage to top of exhaust.



7. Elevator gap, GU canard. You should have a gap between the slot core and elevator equal to the thickness of a tongue depressor. If your gap is too narrow, you will experience a high stall speed and other problems, if the gap is too wide, your aircraft's drag will be higher.
8. New canard ground angle of attack with the new canard you should set your tailswing so that the center of the tailwheel is no more than 31" when WL 15 is level and weight simulating the engine is on the nose, 29" would probably be better.
9. Bathroom scales. Why won't builders listen? Don't do it! Our most recent incident involved a Q2 builder who insisted that he had carefully calibrated his scales, double checked everything and was absolutely certain that it was a waste of time to reweigh his aircraft with proper scales. We insisted and his plane promptly "lost 50 lbs." Friends, this is a good way to get yourself killed. At QAC we won't even taxi an aircraft that has been weighed on bathroom scales.

10. GROUND HANDLING

Some builders have reported reversed aileron steering effectiveness while taxiing. As long as you are aware of this phenomenon it is easily dealt with. If you experiment with your plane and see what happens at different speeds, you can use this information to help you while taxiing in crosswinds. If there are only light winds, you should be using neutral stick.

11. COWL FLAP

Some of you who have had trouble with cooling might be having some troubles with your cowl flap not opening enough or actually closing in flight because of pressures. Another method of actuating the cowl flap is shown below.

12. FUSELAGE SEPARATION SEAL

- (1.) Put Vaseline on the rear fuselage separation surface.
- (2.) Apply white silicone seal around the front separation surface, then assemble. You may also apply 1/4" white pinstriping tape around separation.

13. VOLTAGE REGULATOR

If you are using the liquid firewall you will need to mount your regulator elsewhere so there is a heat sink. A good location would be on the cold air side of the engine baffling on the top of the engine.

GENERAL

We have the following phone numbers for the public: (805) 824-4313 and (805) 824-4626. There is also a private unlisted Builder Hotline number given out only to builders. This number is for Technical Building Assistance only. The Builder Hotline hours are: Tuesday through Saturday, 1 p.m.-4:00 p.m. (PST). Since the demand on this line is large, we ask our builders to have specific questions ready before calling, and *not* to use the line for shipping information, backorders, or option orders. In this manner, we can maximize our builder support.

The Quickie Aircraft Corporation facility at Hangar 68, Mojave Airport, Mojave, CA is open Tuesday through Saturday, 9:00 a.m.-5:00 p.m. Please note that we are closed Sunday and Monday.

To improve customer service, please ask for the following personnel if you have questions in these areas:

Shipping schedule:

Package 1, 2, and 3 Ron Lundgren
Backorders Ron Lundgren*
Literature Debbie Schubert

*Ron requests that builders with backorder problems and/or questions call him between 1:00-4:30 p.m. PST on Tuesday, Thursday, and Friday. This will permit him to spend the mornings on shipping, thereby providing faster service. Ron also requests that all backorder and materials requests be sent to him in writing so that he will have a permanent record in each builder file. In this way, phone calls should only be necessary for followup and/or emergencies.

We ask that all builders please reference their serial numbers on all communications. This will make our job much easier. Also, when writing to QAC, always send a stamped, self-addressed envelope along if a reply is necessary.

Builders of both the Quickie and Q2 have the opportunity to receive rides in N81QA, our Q2, within the thirty day period prior to the builder's first flight in his own aircraft. These rides are by prior arrangement only; in addition, at the same time, suggestions and recommendations will be given to the builder on conducting his early flights to promote safer flying. Over 130 rides have been given to date.

Each Saturday, weather permitting and N81QA in town, we give a flight demonstration of the Q2. We usually get a large turnout on these occasions, and have been selecting an attendee's name from the hat at random for a Q2 ride.

We are doing quite a bit of flight tests on N81QA for new options and of course cannot take passengers during this period. We expect to be completed within 30 days and hope, at that time, to be back to normal operations. At least 7 of our dealers are now flying Q2s so contact your local dealer.

QUICKIE DEALER PROGRAM

We encourage all prospective builders to visit their local dealer, as our dealers not only stock kits, plans, and some materials, but also have real live Quickies, Q2s or Q-200s under construction for you to examine. Further, they can direct you to other builders and enthusiasts in the vicinity.

CALIFORNIA
Q-AIRCRAFT OF SO CAL.
P.O. Box 1551
Carlsbad, CA 92008
619/483-9097

NOR-CAL QUICKIE AIRCRAFT
P.O. Box 275
San Lorenzo, CA 94580
415/276-8102

FLORIDA
SOUTHEAST QUICKIE, INC.
8181 NW 66 Terrace
Tamarac, FL 33319
305/721-9265

LOUISIANA
GRASS ROOTS AVIATION
P.O. Box 215
Delhi, LA 71232
318/878-9464

MAINE
QUICKIE NORTHEAST, INC.
P.O. Box 506
Norridgewock, ME 04957
207/634-2156

MICHIGAN
QUICKIE AIRCRAFT SALES
OF MICHIGAN
P.O. Box 201
Plainwell, MI 49080
616/685-5238
565 Lincoln Rd.
W. M-89
Osego, MI 49078
616/694-2869

MINNESOTA
QUICKIE AIRCRAFT
MIDWEST, INC.
4982 Vine Hill Road
Excelsior, MN 55331
612/474-9245

NEW MEXICO
COMPOSITE AIRCRAFT CO.
P.O. Box 2351
Roswell, NM 88201
Located at Roswell Industrial
Air Center
505/624-1499

NORTH CAROLINA
RAY STROUD
P.O. Box 34
Wilkesboro, NC 28697
919/838-8957

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4230 Grissom Dr.
Batavia, OH 45103
513/732-0800

OKLAHOMA
QUICKIE SOUTHWEST
RT 2 Box 1490
Owasso, OK 74055
918/272-2775 • 918/744-4438

PENNSYLVANIA
R. F. "Bob" McFarland
AERO SERVICES
333 So. Front Street
Wormleysburg, PA 17043
717/763-7654 • 717/737-2665

SOUTH CAROLINA
CLIO CROP CARE
P.O. Box 422
Clio, SC 29525
803/586-9225

TEXAS
Q-CRAFT OF TEXAS
P.O. Box 1717
229-A Industrial Blvd.
Liberty, TX 77545
409/336-6991

PROFORMANCE AVIATION
15507 Hillcrest, #2004
Dallas, TX 75248
214/239-5579

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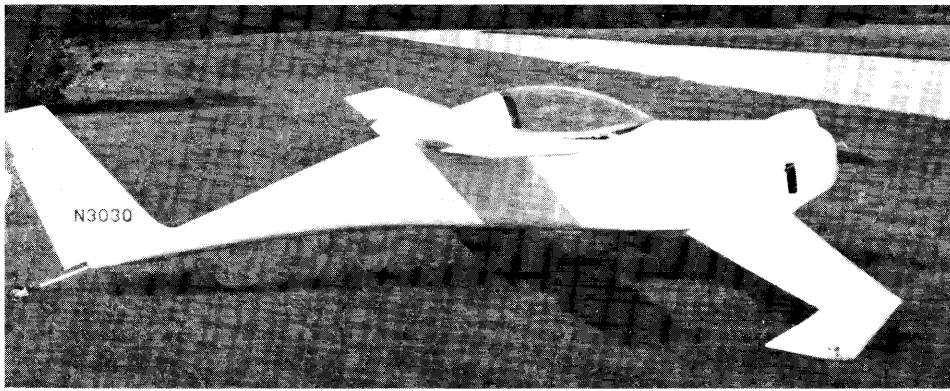
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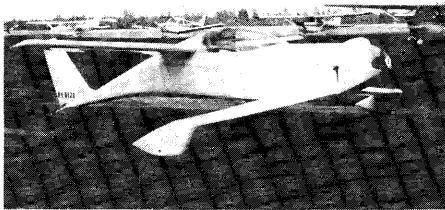
Recently married — Jim and Mary Kisthard. Looks like a great relationship. Mary, the girls here at



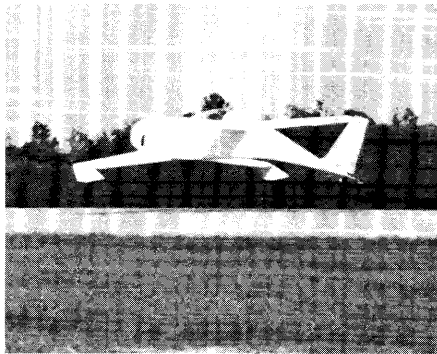
Mojave want to know if you could send some more pictures of Jim?



Arthur Kreutzer's Quickie. He tells us first flight was Feb. 11, 1984 and he had no problems. Congratulations Arthur!



A happy John Hicks of Mary Esther, Florida and his Quickie N401JH.



And here's another shot of John.

QUICKIE NEWS

New Canard: The LS(1)0417 Mod Airfoil Canard for the Quickie has been constructed by our Louisiana Dealer, Lanny Rundell. He expects to have it flying on his Quickie shortly but didn't make it by press time. Lanny, by the way, is working with another firm developing some higher horsepower, liquid cooled, 2 stroke engines for the Quickie...stay tuned.

CITREON ENGINE

Revmaster has not returned our 30+ HP Citreon as yet, but we expect it back soon. In the meantime, many builders have expressed interest to us about this engine. Revmaster must purchase at least 50 units from France in order to proceed. If you are interested in this engine for your Quickie, when approved, please let Revmaster know with a letter or phone call. Contact: Joe Horvath or Dick Joh, P.O. Box 2084, Hesperia, CA 93245, 619/244-3074.

QUICKIE KIT PRICES

QAC knows of at least 150 Quickies that have made first flights.

Please keep builder tips, pictures, component weight information coming in.

Current delivery on a Quickie Kit is 3 weeks. Most components, including engines, are in stock.

Many dealers have Quickie Kits in stock so call your local dealer for availability.

Current prices are \$3,295.00 for Package 1 and \$1,700.00 for Package 2. Note that the complete kit now consists of two packages instead of the original three.

Available options are as follows:

- \$125.00 Large Tire Option.
- 300.00 22.5 h.p. Option including Kevlar engine mount.
- 125.00 Kevlar engine mount separate.
- 125.00 Custom Upholstery set.
- 51.00 Prefabricated fuel tank. (Standard with Package 1.)
- 13.50 Communications or Navigation Antenna kit.
- 150.00 44" diameter propeller. (Discounted price for currently flying builders.)

The 44" diameter propeller is to be used with the large tire option and 22 h.p. engine option. This propeller provides greater rate-of-climb (about 20%) with a loss in top speed of about 4 mph. It would be particularly useful for short fields at higher density altitudes.

For those builders who would like a true climb propeller for the first few flights, rather than the cruise propeller provided with the kits, we have created a 42" diameter, 27" pitch climb propeller and will make it available as follows: with a deposit by the builder of \$150.00, we will send the special prop to the builder for his initial flights. When he returns the prop to us in good shape, prepaid freight, we will return his complete deposit.

QUICKIE BUILDER TIPS

We have rewritten all of the plan changes and builder tips up thru Newsletter #21. If you have not asked for them, do so, there's no charge. When you receive them, why not read them over again?

NUMBER: QBT60

Please refer back to QBT56 for proper checking of your elevator position in flight. One cause of problems in this area is the gap between the elevator and the trailing edge core. Using the installation method outlined in the plans, you should wind up with a gap about equal to the thickness of a tongue depressor. You should adjust your gap until it is correct. We have found that a tight or no gap results in *less* CL max which means a higher stall speed, possible problems with rain or bugs, and ground handling difficulties. If the gap is too large, the drag goes up and can cost you 3-4 mph on the top end.

NUMBER: QBT61

Bathroom Scales — We've had more problems in this area. Please read of the latest episode in the Q2 Builder Tip section. If you use bathroom scales for weight and balance, don't call your airplane a Quickie.

NUMBER: QBT62

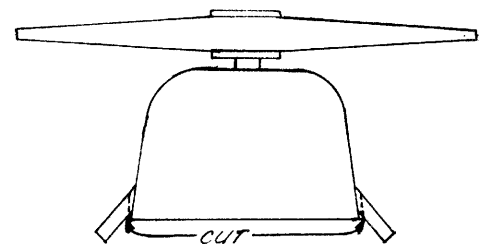
Carb Heat — We have recently learned that some builders have either removed or never installed carb heat. At least two accidents have occurred due to *probable* carb icing. Another problem which most builders might overlook is that the intake system of the Onan needs the carb heat box to help dampen out pulsations. If it is removed, erratic engine running is possible.

NUMBER: QBT63

Cowling Bump — Be sure your bump for the carb heat box is smooth and not flat in the front. We saw photos of one airplane which had a *landing light* installed here. Absurd! An airplane as clean aerodynamically as the Quickie cannot tolerate anything which increases the drag, not to mention the weight.

NUMBER: QBT64

The exhaust pipes should be cut as they exit the cowling as shown:



This is worth about 1½ mph.

NUMBER: QBT65

Liquid firewall requires heat to cure. A radiant electric heater works very well for this purpose...just be careful you don't get the foam in the canard too hot.

NUMBER: QBT66

Calibrate your oil temp and CHT gauges and probes. At sea level, boiling water should read 212°F. A number of builders have reported inaccuracies.

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(805) 824-4313

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Subscription (1 yr.)* \$ 6.00
Quickie Information Package
(2nd edition)* \$ 8.00
Q2/Q-200 Information Package \$10.00
Pilot's Manual* \$ 8.00

*Add \$1.00 for Air Mail overseas (U.S. funds).
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 the Quickie
& Q2 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.

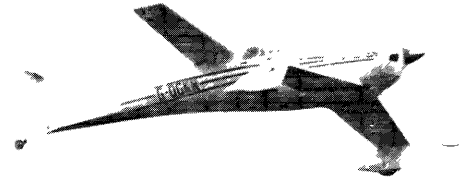


PHOTOS

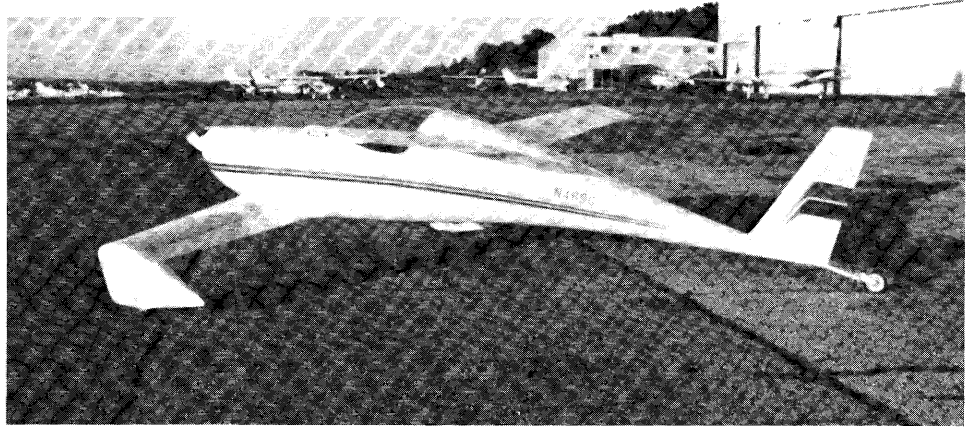
Builders, please send us pictures and
stories so we can use them in the
Newsletter. Black & White photographs
work best but we'll take Polaroids or color
prints. Send them to Quickie Aircraft —
ATTN: Debbie Shubert.

Q2/Q-200 JEWELRY

We now have available a Q2/Q-200
pin and tie tack (gold or silver) for \$5.00.



*Quickie Aircraft of Europe is flying. Thanks for the
photograph Roy Garner.*



Charlie Belshe of Providence Rhode Island.

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