

Building a 36" Replica Old Timer Model: Component Supplies & Sources

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So, you've been to the local field watching the old timer airplanes majestically soar in the sky overhead and wondered what it would be like to own and fly one yourself. You'd even like to build one, but are unsure if you're ready to tackle constructing one of the standard models with their six to seven foot wingspans. All those sticks to cut, sand and glue. And so you're thinking such a project will take a year to complete and you'd really like to have an R/C Old Timer in the air sometime this spring.

Well, I have just the answer for you. Why not put together an R/C Old Timer 36" Replica? Pretty much anybody who has built a rubber-powered model will have little trouble putting one of these together. A half dozen full kits are available from BMJR Models (<http://www.bmjmodels.com/free-flight/old-time-replica>) as well as several from FAI Model Supply (http://www.faimodelsupply.com/?product_cat=kits). And as always, short kits for suitably-sized Old Timers can be found from Bob Holman (<http://www.bhplans.com/>) as well as plans from Jim O'Reilly (<http://www.bhplans.com/>).

Rules for this Old Timer event class couldn't be simpler: A 36" maximum wingspan, electric power of any sort and size, and a two-cell LiPo battery, again any size. (Complete provisional competition rules are at http://www.aalmps.com/Electric_Replica_Rules_03_11_2013.pdf.) But aside from competition, these small Old Timers are just a blast to fly! Several of us in SAM 27 have built them and found that they are not just easy to handle in the air but are as capable of thermal soaring as their full-size counterparts. Plus they make great park flyers!

Now that I've rolled off a list of kit and plans suppliers, what about electronics and other components required to get one of these little Old Timer gems off the building board and into the air? When I acquired my BMJR "Mystery Man" kit, I went online and Google searched for information about what motor and prop size to use, what capacity battery is required and how big of an ESC is needed. Plus where do I get all those other little extra components that otherwise don't come with a kit? Well, to my dismay I found precious little help from the internet. So, instead I contacted fellow SAM 27 club members Loren Kramer and Jim Temple, who I knew were already involved in 36" Replica projects themselves. Well, in short they provided a wealth of information that got me started on my search for electronic and hardware products suitable for these small aircraft.

So, what follows below is my attempt to save you trouble and guesswork by providing a complete list of products and sources in order to jump start your own 36" Replica project. Please understand, though, that I only intend to suggest types and size of components and that you are completely free to find comparable substitutes on your own that will serve the same purposes. Also, I attempted to minimize vendor sources by finding those that carry the most products needed for this type of airplane. And, of course, prices shown are those that the vendors specified at the time of this writing.

Now that I've done most of the computer research for you, the hardest part of your job is done. So, let's get building and see how many new 36" Replica Old Timer models we can get into the air this year. Good luck!!



From BP Hobbies: <https://www.bphobbies.com/view.asp?id=V819427>

* Cheetah A1510 Brushless Outrunner Motor (\$14.95)

Note: This is a Kv 2200 motor designed for props ranging from 5.5" to 7" diameter on a 2S LiPo pack. Other typical "Park 250" motors with Kv values in the 2000 - 2500 range and will work just fine for this application.

* APC 6"x 4" Speed 400 Electric Prop - LP06040E (\$2.13 ea.)

Note: With the motor chosen above, I found this prop ideal. The only difficulty is that you will have to bush the hole with brass/aluminum tubing because the adapter inserts supplied all leave too big a hole for the motor shaft.

* Castle Creations Thunderbird - 9 Brushless ESC (\$25.45)

Note: This is a 9 amp ESC. Any other ESC at or around 10 amps will do. Tower Hobbies also sells this ESC for the same price.

* LW Tissue (choose colors) 20"x 72" (\$8.25/sheet)

Note: This is light weight (LW) polyspan. Also available from BP is GM (Gas Model) tissue which has a fuel proof coating and is slightly heavier but looks and works the same as LW tissue.

* Balsaloc (\$6.25/bottle)

Note: Both LW and GM polyester tissue are iron-on coverings that require a separate adhesive. Balsaloc is a white water-based liquid that is brushed onto the airframe and activated by a heat iron. The advantage to Balsaloc is that you attach the fabric to the airframe after it dries clear, meaning that you can do it days or even weeks later. There is a brand of fabric glue under the label "Tacky Glue" usually found in craft stores (and at HobbyTown) that may work as a substitute for Balsaloc.

From Tower Hobbies: <http://www.towerhobbies.com/>

* Dubro Micro Pushrod System – LXA ZB6 (\$4.49)

Note: Included are two wire pushrods, sleeves, EZ connectors and other hardware.

* Dubro Micro2 Control Horns - LXJGT5 (\$1.32/pair)

* Great Planes CA Hinges 3/4"x 1" - LXX110 (\$3.49)

From Horizon Hobby: <http://www.horizonhobby.com/>

* 280 mAh 2S 7.4 30C LiPo Battery - EFLB2802S30 (\$7.99)

Note: Also available from Horizon Hobby, Hobby Zone, Motion RC as well as Amazon. Actually any 2S LiPo at or around 300 mAh is suitable for the average 36" Replica Old Timer.

* Flyzone Micro Servo Calypso - LXC GHV (\$7.99 ea. - 2 req'd.)

Note: The 3.7 gram servos I bought for the Mystery Man are no longer available from the supplier. I found this Flyzone micro servo, but cannot find a reference to actual weight. However, I suspect it should be adequate for our purpose here. Actually, any micro servo in the 3 to 4 gram range should be strong enough yet small enough to work.

* JST-PH to JST-XH Charge adapter: 200QX – BLH7713 (\$3.99 ea. – 2 req'd.)

Note: One of these adapters will be used in conjunction with your charger. With the other you will cut the wires somewhere between the two plugs. Then you'll need to cut the ESC wires behind the male plug of the battery cable. Next splice the half of the severed JST adapter that has the male plug to the cut ESC wires.

From Amazon: <https://www.amazon.com/>

Note: This is a departure from my usual preference of buying directly from hobby distributors. But sometimes lack of availability forces me to seek other sources.

* SMAKN Mini Motor Micro 3.7g.servo (\$6.60 ea. – 2 req'd.)

Note: These appear to be the exact same servos that I purchased from another vendor and installed in my "Mystery Man".

* JST-PH to JST-XH Charge adapter: 200QX (\$7.17 ea. – 2 req'd.)

Note: This price is considerably more than from Horizon Hobby, but again availability is key.

