The Nieuport 28 presents well in the air and flies nicely. This is a large WW I biplane with plenty of drag and requires power at all times to avoid problems.

The Maxford USA Nieuport 28 is modeled after the aircraft flown by Edward Vernon Rickenbacker, or “Captain Eddie,” as he liked to be called. Rickenbacker was America’s leading World War I ace with 26 confirmed victories (22 aircraft and four balloons) as well as a Medal of Honor recipient. Although Rickenbacker achieved most of his aerial victories flying a Spad XIII, the Nieuport 28 was his mount for the first six.

The Maxford USA 22% Nieuport 28 provides power plant flexibility. It can be flown using a 26cc gas engine, .90 to 1.20 glow engine, or the equivalent electric power system.

The model arrived well packaged and the covering required minimal attention before starting the build process. The complex camouflage pattern is applied at the factory using iron-on film. The wing insignia and number 12 are also preapplied. The builder must apply the self-adhesive numerals and other markings.

Assembly

Maxford previously released a 68-inch span Nieuport 28 which was finished in the colors of Quentin Roosevelt. The 70-inch Rickenbacker Nieuport 28 reviewed here has incorporated several changes and improvements. When searching for information or flight videos, you may find details on either aircraft.

Maxford USA provides all of its manuals online and they can be easily downloaded in PDF format. The Nieuport 28 manual is 16 pages and should be thoroughly read before beginning the build. Because the manual is available online, we will only touch on some of the assembly process steps.

The landing gear comes preassembled and needs to be installed onto the aircraft and the wheels mounted on the axle. A landing gear retainer slides into the rear opening in the fuselage and after the lower wings are installed, it’s held in place by a clear plastic wing/landing gear retainer. When you are comfortable with its location, it is used as a template.
The Nieuport 28 comes with the complex camouflage pattern preapplied as well as the insignia and number 12. The covering required little attention before assembly began.

Front of the motor box and properly spaced mounting holes were drilled. The motor box supplied with the aircraft is adjustable and can slide in and out of the fuselage to ensure proper spacing. The box can be removed from the aircraft to allow easy access to the front inside of the aircraft. The cockpit floor is also removable to provide additional access.

The electric motor box was fastened to the main motor box with the E-flite Power 110 mounted to determine the proper spacing for the cowl. The main box is attached to the firewall using two aluminum L-shaped brackets. The brackets are attached with six screws each. Three go into the firewall and three into the motor box.

The holes in the L bracket are not offset and the screw heads were able to contact each other. The holes for attachment to the firewall were redrilled to be offset so that the screws could be fully tightened. The mounting holes were strengthened using CA. The top corner of the L bracket also needed to be trimmed to clear the cowl ring.

The Max Cowling cowl uses an inner ring that fits over four screws attached to the firewall and is then turned counterclockwise to lock into place. This allows the cowl to be mounted without using external screws—a nice touch!

Several Maxford USA models have options that can be purchased to add additional details. In the case of the Nieuport 28, those include a 1/5-scale pilot figure and a 1/5-scale Vickers machine gun set. Those options, combined with the included windscreen, turtle deck, venturi, and air intake, provide a nice
level of detail and complete the model.

Maxford supplies unassembled wooden wing supports that brace the right- and left-wing sets, allowing them to be removed together. Although they are fairly basic, look closely at the photo in the manual to ensure they are properly assembled.

Mounting the radio gear was simple and straightforward. The standard size Hitec servos fit into the openings in the fuselage without issue. The mounting blocks for the wings are constructed to match the servos of choice and also worked well.

The receiver was mounted at the rear of the removable motor box and the ESC and BEC were mounted to the top and bottom of the electric motor box respectively.

The batteries mount vertically to the sides of the electric motor box and plug into a series Y harness to allow two four-cell batteries to work as an eight-cell battery.

Thunder Power 4S 5,000 mAh packs were originally chosen for the project, but they proved to be too long to fit inside the cowl ring. Two Thunder Power Pro Lite Plus 25C 4S 3,300 mAh batteries were substituted and fit without issue. Because of the lower weight of the smaller packs, 14 ounces of additional weight was screwed to the top front area of the electric motor box to obtain the proper CG.

**A word of caution:** If mounting the batteries to the motor box when using the electric setup, the propeller and cowl must be removed to access the batteries. After the batteries are mounted they must be connected and then the cowl and propeller reinstalled. If this method is used, it is strongly recommended to use a switch to ensure that the motor cannot accidentally start.

Most transmitters also can be programmed for throttle lock or hold, preventing the motor starting if the throttle is bumped. Another option would be to cut part of the bottom of the cowl away to provide access to the battery plugs.

**Flying**

The high-rate throws provided in the manual were used on all control surfaces. Exponential was not used and a 25% aileron-to-rudder mix was programmed in the radio.

On the takeoff roll, the Nieuport became airborne after reaching approximately half throttle, with only minor right rudder input to keep it straight. Two-thirds throttle provided a nice climbout.

As with most World War I biplanes, using both ailerons and rudder in the turns provides the best results. If you are not comfortable feeding both inputs at the same time, a 25% aileron-to-rudder mix appears to be nearly perfect.

The Nieuport is capable of basic aerobatics such as loops, wingovers, and rolls. The rolls look better when a bump of down-elevator is input through the inverted portion of the maneuver.

As is typical with a WW I biplane, the rolls are more barrel rolls than axial. Sustained inverted flight requires constant down-elevator. The rudder is effective and the model can easily provide knife-edge-type photo passes.

Because this WW I biplane has flying wires, the aircraft has plenty of drag. The Nieuport will allow for slow flight, but cut the power back too far and it will stall. Stalls are gentle, but the model will drop a wing if the stall situation is not quickly corrected.

Landings are best made into the wind. After the aircraft is aligned with the aerodrome, slowly reduce throttle to allow the airplane to descend. Use small elevator inputs to keep the aircraft level. After the wheels touch, completely pull the power off.
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model type:</th>
<th>Gas, glow, or electric semiscale ARF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill level:</td>
<td>Intermediate builder; intermediate pilot</td>
</tr>
<tr>
<td>Wingspan:</td>
<td>70 inches</td>
</tr>
<tr>
<td>Wing area:</td>
<td>1,165 square inches</td>
</tr>
<tr>
<td>Length:</td>
<td>56 inches</td>
</tr>
<tr>
<td>Radio:</td>
<td>Spektrum DX18 2.4 GHz transmitter; Spektrum AR7000 DSM2 receiver; four Hitec HS-5485HB servos</td>
</tr>
</tbody>
</table>

**Components needed to complete:**

- Building supplies; four-channel radio with four servos (five for gas or glow); 1,200-plus-watt electric power system

**Power system:**

- E-flite Power 110 outrunner brushless motor; APC 17 x 8E propeller; Castle Phoenix ICE2 HV80 ESC; Castle CC BEC PRO switching regulator; two Thunder Power

<table>
<thead>
<tr>
<th>Flight duration:</th>
<th>8-plus minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flying weight:</td>
<td>13 pounds</td>
</tr>
<tr>
<td>Wing loading:</td>
<td>25.7 ounces per square foot</td>
</tr>
<tr>
<td>Full throttle power:</td>
<td>43.29 amps; 1357.5 watts; 104.4 watts per pound</td>
</tr>
</tbody>
</table>

### PLUSES

- Excellent flight characteristics.
- Nice scale features.
- Cowl is easy to remove.
- Sliding motor box provides flexibility for power options.
- Looks great in the air.

### MINUSES

- Covering could use a matte finish.
- Elevator linkage hole leaves a large, unnecessary opening in the fuselage.

When taxiing back, utilize up-elevator to keep the tail planted. Avoid trying to make tight turns and the Nieuport will enter and exit the field as a WW I fighter should—on its wheels and off the wingtips!

### Conclusion

The Maxford USA 22% Nieuport 28 wasn’t difficult to build and is a joy to fly. It provides the thrill of piloting a WW I fighter flown by America’s top ace without needing to be an ace pilot.

Although some may be put off by its shiny covering or because it has a tail wheel instead of a tail skid, most will appreciate it for what it is—a low-cost, Giant Scale biplane fighter that can be comfortably flown by an intermediate pilot.

—Jay Smith
jay@modelaircraft.org

—Jack Frost
jefsquared@gmail.com

### MANUFACTURER/DISTRIBUTOR:

Maxford USA
15939 Illinois Ave., #B-C
Paramount CA 90723
(562) 529-3988
www.maxfordusa.com

### SOURCES:

Spectrum
(800) 338-4639
www.spektrumrc.com

E-flite
(800) 338-4639
www.e-flite.com

Hitec RCD
(858) 748-6948
www.hitecrdc.com

APC
(530) 661-0399
www.apcprop.com

Nieuport 28 manual
www.maxfordusa.com/nieuport-28ep40arf-1.aspx