

# MAXFORD USA'S

# Fieseler Storch



By Chris Susicke

*The legendary German liaison craft in beautiful R/C sport scale electric form!*

PHOTOGRAPHY: CHRIS SUSICKE

The Fieseler Fi-156 *Storch* is quite possibly the most recognizable of WWII's liaison aircraft to see service. The abundance of landing gear struts, slats, wing struts and various protrusions all over the place set it (way) apart from the American L-4 *Grasshopper*. Like the L-4 it sported an unusual name, *Storch*, meaning stork in German, for its long, slender gear legs.

The *Storch* served valiantly during the war, and was most well known for its involvement in the daring mountain top rescue of Italian dictator Benito Mussolini. Hanna Reitsch also famously landed a *Storch* in Russian occupied Berlin to allow a meeting between Robert Ritter von Greim and Hitler in his Führerbunker. She then successfully flew out, dodging intense Russian anti-aircraft fire the whole way. The *Storch* was even Erwin Rommel's stead of choice.

When I heard that Maxford USA had taken on the task of modeling this famous STOL (short take-off and landing) aircraft, I knew that I had to get one. Maxford USA is known for turning out nice quality models, so I got right to work once my *Storch* arrived.

Maxford's *Storch* has a lot going for it. It spans a large 63 inches, which allows a lot of room for detailing. Maxford made use of this and loaded the model up with enough goodies to make a scale nut drool. Also, it comes with all six of the micro servos installed. You just provide your own motor, ESC, battery and receiver.

Once I opened the box I was pleasantly surprised with the quality. The covering, al-

though very yellow, was expertly applied. It is obviously supposed to represent a beige desert camo scheme, but the yellow really doesn't take anything away from the model.

There is also a detail upgrade box available separately which includes a rear gun, instrument panel and a few other pieces. Having it makes this beautiful model stand out even more (especially the machine gun).

The manual for the *Storch* is detailed and has a history briefing on the aircraft, which is a nice touch. It has you first insert and glue the aileron and flap hinges. but this is actually already done for you. Well that was easy.

After powering up my radio and receiver, I centered the six pre-installed micro servos. Next, the aileron and flap control horns are glued in. They are disguised as counterbalances. Next, the linkages are installed. A neat feature is that the flap servo (one per side) also drives the leading edge slats thanks to a double sided servo arm. The leading edge slats on my model moved fluidly, which amazes me considering that each slat has 6 pivot points. Once all the connections are made, all of the surfaces can be trimmed and adjusted as necessary for equal amounts of throw on each wing.

A scale purist might note that the actual production *Storch* actually had fixed leading edge slats. My research indicates that drooping leading edge slats may have been experimented with early on, but that's about it. If you wanted to, you could just glue the slats fixed. It is so neat to see the leading edge slats drop with the flaps that I left them as is.

The *Storch*'s signature landing gear goes

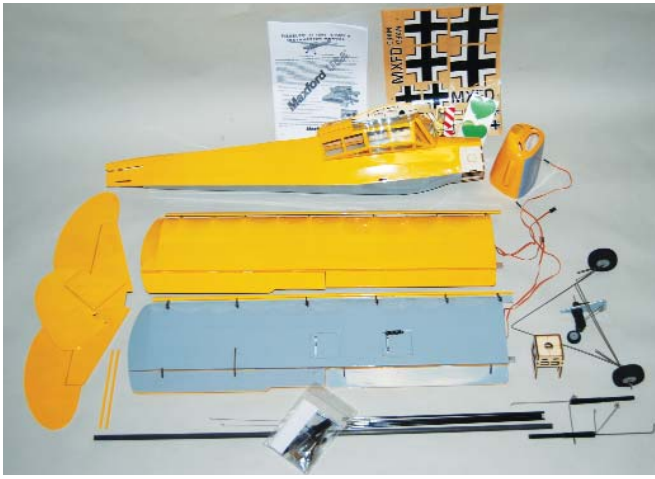
## AT A GLANCE

Type:	R/C sport scale electric
Construction:	balsa and ply
Wing span:	63 inches
Wing area:	397 sq. in.
Airfoil:	flat bottom
Length:	40 inches
Weight:	2.8 pounds
Wing loading:	16.69 oz./sq.ft.
Motor required:	Uranus 35425 or similar (E-flite Power 15 used)
Battery:	2,200 mAh+ 3S Li-Po
ESC:	40 amp+
Radio:	6 channels, 6 micro servos
Manufacturer:	<b>Maxford USA</b> 15247 Texaco Ave Paramount, CA 90723-3917 866-706-8288 www.maxfordusa.com

on next. Out of the box the strut assemblies did not even come close to lining up with the pre-drilled holes, but some simple hand bending fixed that. Small wood screws secure the struts to the fuse with brass tabs that are pre-soldered on the gear. The struts are spring loaded too.

The rest of the gear is two large "A" arms that meet at the axles. The manual incorrectly labels rear portion as the front, but





The Maxford USA *Storch* comes with a lot of goodies (above left). Pre-hinged surfaces, six pre-installed micro servos and loads of detail come standard. The



optional detail kit comes in this neat laser-etched box (above right). You get a seat, instrument panel, oil cooler, wing light, pitot tube and MG 15 machine gun.

this is easy to catch as it only lines up one way. The rest of the gear was a breeze to install and really looks great once it is on. It nicely represents the “jungle” that is the *Storch*’s gear.

The stabs can now be fitted. Standard fare here. The covering needs to be removed on all of the gluing surfaces. Dry fitting revealed no need for any trimming or sanding. My only deviation here was that I added a small portion of a CyA hinge on the bottom of the rudder where it meets

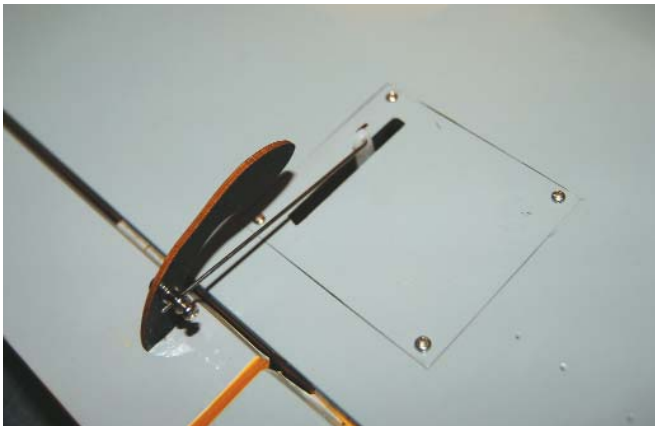
the rear of the fuse. Stock there is none, and I felt like there was a little too much play. This simple fix eliminates it.

Once all this is dry, the control horns can be hooked up for the elevator and rudder. The rudder uses a double control horn and two pushrods. One side goes through the pre-installed pushrod tube and the other side drives the scale tailwheel. I found this setup to work very well and was pretty easy to get working properly.

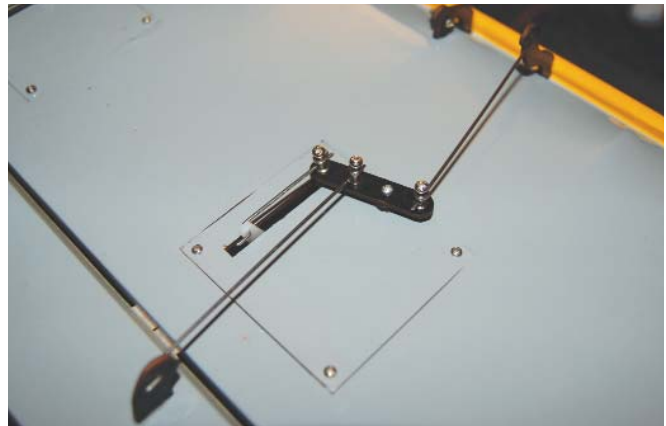
The motor box for the *Storch* comes sepa-

rate from the fuse. The box slides into, then locks down to the firewall. As always I made sure to dry fit everything before committing to glue. Maxford USA’s *Storch*’s cowl, like the real thing, gently slopes to the nose. The full-scale’s inverted Argus V-8 engine dictated this. Mounting a round electric motor means that space above the motor shaft is at a premium and the opening for the prop adapter needed to be opened up a bit for decent spacing.

Once I was happy with the fit, the E-flite



The aileron servo installation uses a counterbalance as a control horn (above left). How cool! This is the flap/leading edge slat drive system (above right). The precision fit on the pre-installed slats means that the tiny servo drives these large surfaces effortlessly. The *Storch* landing gear bolts to the



side of the fuse (at left). Some slight bending was required to get the screw holes to line up. The rudder is shown here with its control horn glued in place (below right). Chris added the section of CyA hinge as the bottom of the rudder would be unsupported without it.



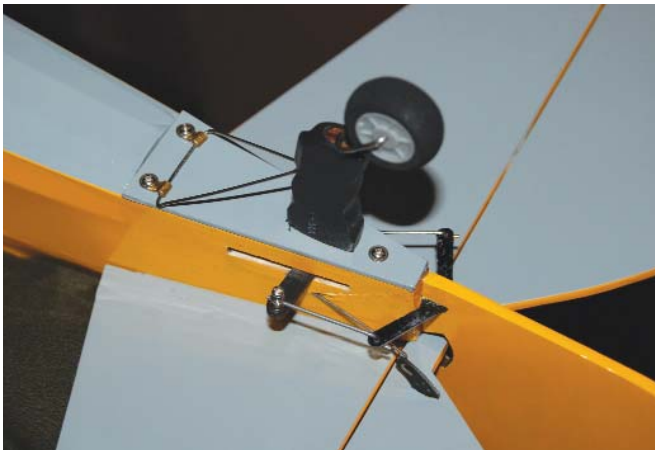
## Maxford USA's Storch



The elevator control horn needs to be threaded onto the Z-bend on the pushrod before it is glued into the elevator (**above left**). The slot is pre-cut and the geometry is slightly off, however it won't matter on a model like the *Storch*. The tailwheel assembly (**above right**) has quite a bit of effort put into it to look



like what the real plane had (although it had a skid at the bottom, not a wheel). The installed tailwheel showing how it is driven (**below left**). A neat system. A look inside the top hatch shows the pre-installed rudder and elevator servos (**below right**). Note all the lightened areas and the hatch magnets.



Power 15 and E-flite 40 amp ESC were rigged up and secured. Make sure you give yourself enough room to be able to easily access your battery through the top hatch.

The most outstanding feature on this model is that the wings fold back like on the real aircraft. This is achieved with aluminum tabs, that act as a hinge, and are pre-glued into the trailing edges of the wings near their root. A large machine screw is the pivot point. To uti-

lize the folding wing feature you need to fold one wing back, then slide the long carbon fiber wing tube through the fuse and into the unfolded wing. The tube slides all the way into that wing half. Unfold the other wing, then slide the rod from the center section into the other wing. There is a dot of red paint that marks the center of the spar, but you have no idea where it is when sliding the rod around. I used a marker to expand the mark to the

whole circumference, since it is very easy to miss.

Next up are the four wing struts. Obviously they need to be able to telescope as the wings fold rearward. They are carbon rods with aluminum ends, one of which is not glued. These bolt to the wings and to a bracket which is glued to the fuse. The screws and nuts need to be just loose enough to allow movement, but not to loosen. Once



Chris used an E-flite Power 15 (**at left**) which is comparable to the recommended Uranus motor. Chris added tri-stock around the motor box for added rigidity. The installed wing struts (**above**). These ends telescope to accommodate the folding of the wings.





A nice shot showing the MG 15 machine gun installed in its bubble (above left). Little details really set this plane off. Check out the instrument panel (above right). It even has throttle and flap levers! The completed and ready to



fly *Storch* sits with her wings folded (below). Chris prefers to fold the wings under the stabs so as not to put any load on them. They also fold closer together this way because of the stab struts.



all of this was done, I was surprised at how easily the wings folded back.

Scale tail bracing is also included. These are only cosmetic, so tacking them down with a small amount of CyA seems to hold them just fine. Looking at the nearly complete model I was really surprised to see how big it actually is. That high-aspect ratio wing gives the *Storch* some serious width!

Maxford USA provides some nice decals for the *Storch*. They are scale-ish, but do not represent an actual aircraft. In fact, an astute observer will notice that MX+FD happens to look a lot like Maxford. A large green heart and a coat of arms gives the model a real German touch.

The extra detailing items I got in the optional kit were installed next. The instrument panel glues right in while the MG 15 machine gun requires a little cutting, but is probably the best piece of detailing on the plane. The chin oil cooler, wing light and pitot tube easily glue into pre-drilled holes. The more stuff hanging off this plane the better it looks!

I noted that Maxford USA's website ([maxfordusa.com](http://maxfordusa.com)) shows the *Storch's* wings folded back and on top of the horizontal stab. There is enough play to go above or below the stab and I think it better to go below it. This way the weight of the wings is off the tail and the wings fold back further because they avoid the tail struts.

The recommended battery is a 2,100 mAh 3S Li-Po, but I found that the *Storch* was

slightly tail heavy with my 2,200 and would have required a small amount of lead to correct. A 2,350 mAh 3S flat pack I had fit perfectly in the battery compartment and had the *Storch* balancing right on the wing tube. Throws were set per the instructions, and the *Storch* was ready to fly!


Flying the Maxford USA *Storch* ended up being a very pleasant experience. I was initially wary of the relatively high wing loading (nearly 17 ounces per square foot) but

my fears were quickly put to rest. The best way to describe how the *Storch* flies is that it is comparable to a *Cub*.

With its high-aspect ratio wing it politely asks that you to use rudder in your turns and generally flies in a scale manner. With the flaps and slats down, the *Storch* slows down nicely with no tendency to pitch. Stalls are gentle and straight ahead. Because of the wide landing gear ground handling is excellent, and the spring loaded struts easily soak up bumps.

Recommended throws feel about right, with aileron response feeling just slightly lacking. It is important, however, to remember that this is no acrobat. It looks best with the flaps and slat down, just kiting it up with a head wind. Take offs with the flaps and slats down are possible with about half the ground roll without them. One must be careful not to stall the *Storch* in this configuration.

In terms of power, the E-Flite Power 15 with a 13-6.5 APC prop provides more than the *Storch* will ever need. Scale-like flight is achieved around 1/3 throttle with this setup.

The Maxford *Storch* is a great example of a seldomly modeled classic aircraft. Overall quality is excellent and the level of pre-fabrication is high. It always draws attention at my field and it is one of my favorites in my hangar. 



The Maxford USA *Storch* looks great in the air with all those struts and protrusions. It flies great and always draws attention!