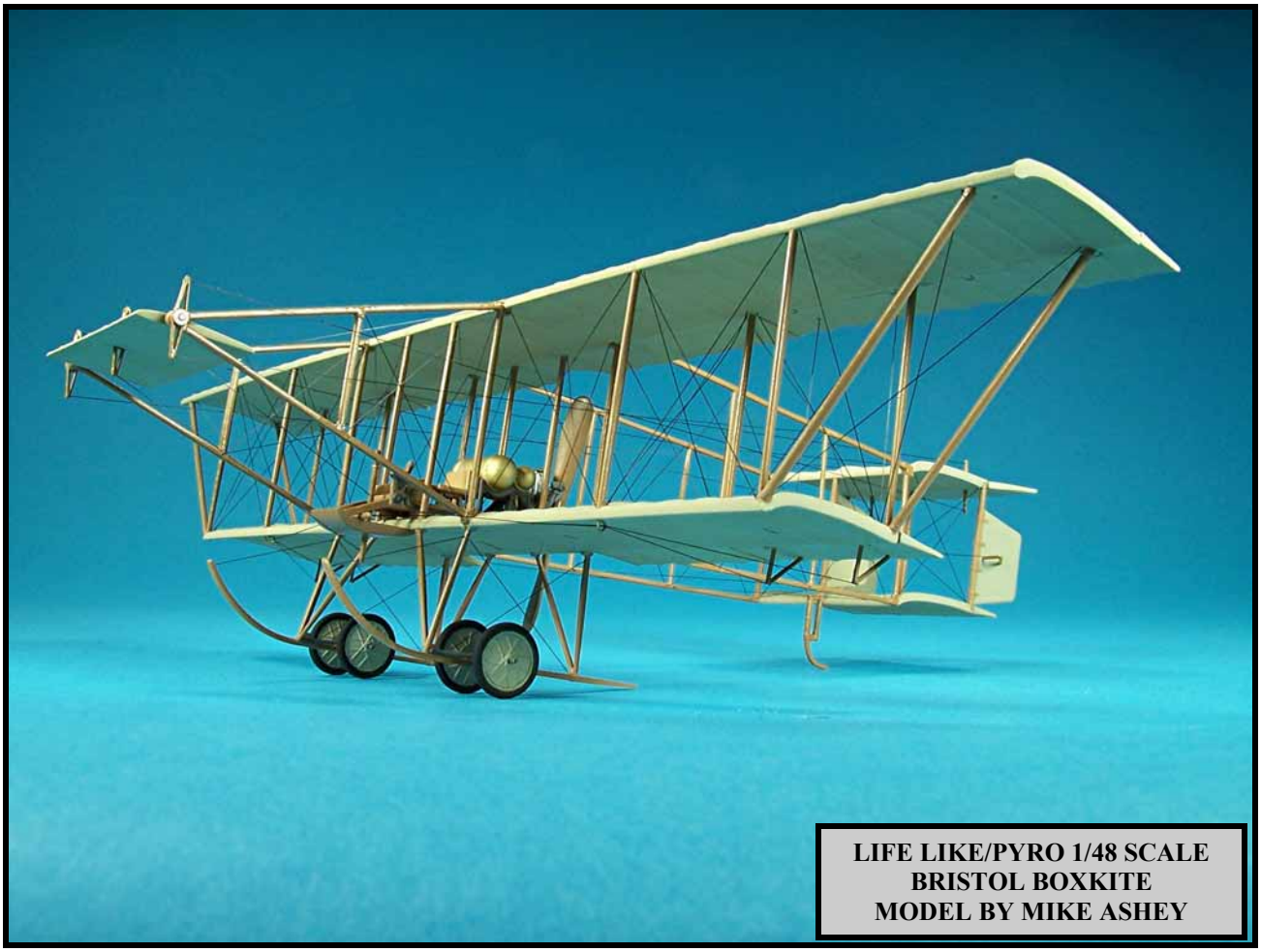


LIFE LIKE/PYRO 1/48 SCALE
BRISTOL BOXKITE
MODEL BY MIKE ASHEY

CHAPTER 5

GUNS, FLYING WIRES, CONTROL CABLES AND ANTENNAS

GUNS

There are several things that you can do to improve the appearance of guns such as adding gun sight rings, ammo belts and a good paint job, but the single most important thing that you could do is to hollow out the barrels. Since these parts can become very fragile after drilling, especially in the smaller scales, so all preparations such as scraping and sanding should be completed prior to drilling. It is important that the surface that will be in contact with the drill bit be smooth and flat so that the drill bit will not skew off to one side so be sure the tip of the barrel is flat. I like to use a number 11 blade to remove the mold lines using very light strokes and then use a Flex –I – File to restore the round appearance of the barrel. Once the plastic has been cleaned, sanded and the tip of the barrel flattened, the part is ready for drilling.

There are two basic ways to bore out gun barrels. The first method is by hand and the second is to use a Dremel drill press and a Dremel vice. When selecting drill bits start with the diameter that

you want the finished hole to be and then select several other sizes that are smaller than the finished diameter. What you want to do is slowly work up to the finished diameter because if you try to remove too much plastic you can collapse the plastic walls or fracture the plastic. I usually try to use every other size diameter drill bit until I get to the finished diameter.

Before we get into the drilling you need to decide weather you will use the kits guns or make new barrels from round stock. If you are not going to see anything except a small portion of the length of the barrel or just the tip you may want to replace the gun with round stock and save the kit part for another project. I like to use Plastruct rod for my gun barrels as their rod is always perfectly round. I cut the lengths that I need, I flatten the ends with a Northwest Short Line true sander and I always cut extra lengths because I never get it right every time. I then place an indentation in the center of the rod for a pilot hole. If the indentation is not centered you can adjust it by angling the tip of the punch.

Start drilling with the smallest bit and check the centering of the hole. If it looks good move on to the next diameter and so on until you achieve the diameter opening you want and be sure to hold the pin vise straight. Practice builds confidence and do not be disappointed if you destroy a few lengths of plastic or end up with some rejects. If your drill bit becomes offset from the center sometimes you can correct this by removing the plastic from the off centered side using the tip of a number 11 X-Acto blade. I then move up two drill bit sizes, which usually helps to self-correct the off centered hole. Here again this does not always work and that why I recommend that you cut spare lengths.

The second method is to use a Dremel Drill press to bore out the tip and if your hands are not steady using the press will yield good results for you. The technique for boring out plastic using a Dremel drill is the same as doing it manually with respect to using multiple drill bits and working up to the required diameter. The big difference with the Drill press is that you have to set up the part in a vice so that it is parallel and in line with the drill bit.

Set up the drill press and install the first drill bit into the motor tool. Place the barrel between two strips of balsa wood so that about 1/2 inch of the barrel is protruding from between the balsa strips. Press the balsa strips together, and then position the sandwiched part into the Dremel vise and tighten it just enough to prevent any slippage. By pressing the balsa strips together, you will effectively push the part into the balsa, which will prevent the part from moving. Also be sure the barrel is straight. To ensure that the drill bit and part are truly centered, turn on the motor tool at its lowest speed and very carefully drill a slight indentation into the part just deep enough to see. If the indentation appears to be off center adjust the position of the vise accordingly and repeat the procedure. Also, do not forget to wear safety glasses.

Once you are confident that the bit is centered, you are ready to begin drilling. Keep the motor tool set at its lowest speed and do not let the bit come in contact with the plastic for more than a few seconds at a time. If you push too hard and try to finish the job all at once you will melt the plastic and ruin the part. You may also find that during drilling a thin layer of melted plastic has covered the drill bit tip. It can be easily removed with the tip of a number 11 X-Acto blades, but it is also an indication that you are drilling too fast.

For guns on bombers I recommend that you add gun sight rings and front sight aiming posts to the guns. Several photoetch manufacturers make excellent gun sight rings that can be easily installed with a small drop of super glue. To help secure the part in place drill a small pilot hole at the location of the ring so that the rings post has a firm attachment point. Front sight aiming posts can be made from tiny lengths of plastic strip. Ammo belts can be added using Eduard's pre-painted photoetch gun belts.

Another added detail is to attach lengths of clear nylon sewing thread painted black with a sharpie to the back of each single gun and then attach both ends of the thread to the interior walls of the bomber. This will represent the bungee cord, which held the guns in a stationary position and helped support some of the gun's weight.

When you are ready to paint the guns I recommend that you use Testors buffing metalizer gunmetal. Spray on two coats and polish the part with a Q-Tip. You will find that the cotton tip will only polish the larger raised surface areas resulting in a two-tone appearance highlighting the gun's detail.

Another detail that you can add is to hollow out the shell ejection ports on fighter planes. Most fighter plane kits have very pronounced indentations in the lower wings for the shell ejection ports, but they are not hollow. To remove the plastic, drill a starter hole through the plastic and then enlarge the hole with a number 11 X-Acto blade. The outlines of the ejection ports will help provide a guide for the knife blade, but be careful not to damage these areas. Once the holes are enlarged you can use your micro files to remove the remaining plastic.

FLYING WIRES

The are two challenges to building aircraft that have multiple wings, struts and flying wires. The first challenge is to insure that the wings and struts are aligned correctly and the second one is adding flying wires and control cables. For 1/72 scale and 1/48 scale aircraft I like to use clear nylon sewing thread painted with a black or silver sharpie and I literally sew the flying wires onto the model. On 1/32 scale aircraft I like to use stiff wire painted with a silver sharpie.

Building biplanes requires some special construction techniques because you are dealing with multiple wing levels and wing struts that must be properly aligned. Just about every biplane I have built has had some type of minor fit problem with the struts and the upper wing, and the best way to detect these is to assemble the wings and the struts with masking tape to check the fit and to see how the wings are positioned. I usually build the fuselage and attach the lower wings first, build the upper wing and then set the struts and the upper wing with masking tape. In most instances you can solve a positioning problem by making slight adjustments to the upper wing and struts.

Another good reason to attach the struts and the upper wing with masking tape is that it will allow you to check and set the flying wire locations. Once the wings and struts are glued, there is not a lot of room to work between the wings so do the prep work before assembly. In order to do this you need to coordinate the lower and upper wing termination points for the flying wires, and this can only be done with the wings set up in their correct locations. Most 1/32-scale kits have the

flying wire locations either marked or there are holes in the wings and the fuselage. Even with these marked locations it is a good idea to check your documentation to insure that the manufacturer did not miss anything.

To sew the flying wires on a model, drill the location holes all the way through the wing. If you are using wire just drill a hole deep enough to accept the wire. If the manufacturer did not provide at least pilot hole location for the flying wires, I recommend that you consult your documentation, mark the locations and then drill the holes. Also, be sure that you angle the holes in the direction of the flying wires so that the wires will sit correctly.

Once you have finished locating the flying wires and you are ready to assemble the struts and the upper wing you will need to first paint the fuselage and lower wing. The struts and the upper wing will need to be painted separately and then attached. Keeping the upper wing and the struts separate will allow you to achieve a quality paint finish since airbrushing the underside of the wing and the interior struts after they are attached would be very difficult.

When you are ready to assemble the struts and the upper wing position all the parts using masking tape. Be sure that you remove the paint from the gluing surfaces of the strut attachment points on the wings and the tips of the struts so that the glue will make a strong bond. When you are satisfied that the wings and struts are positioned properly, apply a drop of super glue to the lower strut locations. When the glue dries turn the model over and then glue the upper strut locations. When applying the super glue be very careful not to let the glue bleed onto the wing surfaces and remember that you only need a small amount at each location. To fill the voids where the struts attach to the wings use white glue as filler, apply the glue with a thin wire applicator or a toothpick and then contour the glue with a damp Q-Tip. Apply touch up paint if necessary.

Now you are ready to add the flying wires so lets start with the sewing technique. When you remove a length of this thread from the spool it will have a tendency to coil up because it has been sitting tightly wound around a small diameter. Simply stretch the thread using slight pressure and it will almost lay straight. I always start with a length much longer than I need so that I have a lot of thread to work with. On 1/72 scale kits use black nylon sewing thread straight from the spool and for 1/48 scale kits paint the thread using a sharpie. Slice the center of the felt tip of the marker, tape one end of the thread to your work bench, stretch out the thread and then run the tip of the pen across the thread by imbedding it into the slice in the felt tip. Make a few passes, let the ink dry and then add a few more coats.

Now you are ready to sew the rigging onto the model. Using this technique is especially helpful if you have multiple struts across the span of the wing and the flying wires are crisscrossed from left to right across the length of the wing and from front to back across the width of the wing.

The first rigging to add is from the front to back across the width of the wing between the struts. Cut lengths at least twice as long as you need and thread it through the appropriate holes. Secure one end with masking tape and then gently pull the other end tight and set it with masking tape. After I complete the entire front to back rigging, I check my work to insure that everything is set correctly and the thread is taught. I then applied a drop of super glue on the outer sur-

faces of the wings where the masking tape is holding the thread. The glue will bond the thread to the plastic almost instantly. The capillary action of the super glue will pull it into the hole making a very strong bond between the nylon thread and the plastic.

Remove the masking tape and repeated the process for the opposite side of the wing. After the glue has dried carefully cut the nylon thread flush with the surface of the wing using the tip of a new number 11 X-Acto blade and then add enough super glue to each location to fill and seal the holes in the upper and lower surfaces of the wings where the thread was cut.

Next, literally sew the rigging on the wings starting from the outer end of the wings working towards the fuselage. The starting point will need to be attached with masking tape and as you carefully loop the thread through the holes be sure to leave excess thread between them as you come up through the outer wing surface and then sew down into the area between the wings. A one inch loop should be just about right to work with once you have completed sewing a length of the thread. Again secure the finished end with masking tape. When you have completed all the sewing along the length of both wings carefully check your work. Correct any mistakes and be sure the thread locations and positions on both sides of the wings match. Gluing these long lengths of thread is a stepped process and here is where the loops on the outer surfaces of the wings are needed.

Secure one end of the thread with super glue, carefully pull the tread tight along the first length using the loop, secure the thread with masking tape and then place a drop of super glue into the hole. Now that the first length of thread is taught, remove the masking tape, apply a drop of super glue to the hole where the looped thread goes into and then repeat the process for the next length of thread. This stepped approach takes a little time to complete but when you are done all the lengths of thread will be taught. Next trim off all the excess thread and fill the holes with super glue.

After all the glue dries carefully scraped the super glue flush with the wing using the tip of a number 11 X-Acto blade and then lightly sanded each location using a small strip of 400 – 600 grit sand paper wrapped around a length of balsa wood so that the sanding would be confined to a small area around each hole. If the holes are located close to a wing tip you can also use a sanding stick. Check your work with silver paint, and add more super glue if necessary and sand again. Once you are satisfied with the surface, wet sand the areas and then polish the surface with small balls 0000 steel wool secured between the tips of your tweezers. The steel wool will also blend in the surrounding paint. As you sand you will notice that the completed assembly is very strong and that's because the rigging is secured with super glue and the nylon thread adds strength to the finished assembly making sanding and scraping easier.

If your wing surface has canvas surface detail you can simulate this by roughing up the sanded areas with courser steel wool. Use your airbrush to remove any residue plastic dust and steel wool and then spot prime the bare areas overlapping slightly onto the painted surfaces. Next spray the finished coats onto the surface and again overlap. Light, thin coats will blend into the surface rendering the areas your worked on invisible.

The second technique is to use real wire for the rigging. For 1/32 scale kits I recommend that

you use wire close to .019 inches in diameter. This stiff wire can be found in hobby stores that carry radio controlled airplane hardware.

To measure the approximate length of a flying wire section, use a ruler or a length of plastic strip to measure the distance between the end points of the flying wire. Be sure to add approximately an inch to the measurement so that you will never cut a length too short. The next step is to form fit the wire into its location and the only way to do this is to install the wire in its location to check the fit. If it is too big, cut a small length off the end of the wire, test fit it and cut another small length if necessary. The wire should be straight and not bowed.

I recommend that you install the wires as you cut them to their proper lengths. In most instances, once you cut a wire to its correct length and install it in its corresponding holes it will not fall out if you have a tight fit. Once you are satisfied with the fit, color the wire with a silver sharpie. If you are working with pairs of wires, installing both wires before you glue them helps insure that you do not mix up the corresponding holes, which is easy to do if the wires are situated very close to one another. Give each end of the flying wire a tiny drop of super glue. Use Elmers white glue to fill in a voids where the flying wires attach to the wing of the fuselage.

CONTROL CABLES

Control cables were exposed to some degree on many biplanes, but as aircraft designs improved, aileron and elevator control cables were incorporated into the wings and the fuselage. As in the case of flying wires, sometimes kit manufacturers locate the holes and provide control horns where the control cables emit and attach to on the control surfaces and sometimes they do not.

If there are no holes in the fuselage for the tail surface control cables, mark these locations by checking your documentation and then drill these holes into the fuselage. After you start the hole I recommend that you angle the hole in the direction of its attachment location on the rudder or the elevator. This way the cable will appear as though it is angled correctly as it protrudes from the fuselage. Also be sure that the holes that you drill on both sides of the fuselage are symmetric.

For most biplanes the control cable material I recommend that you use is stiff wire or nylon sewing thread. The appearance of how the control cable emits from the area of the fuselage or the wing is important as it should be straight and not appear to be curved or bent. Nylon sewing thread can sometimes give you this effect and I have found that the nylon thread works best when both ends can be glued, one at a time, so that you can make the thread taught.

When I am ready to install the control cables I like to do the fuselage ones first as these can be done quicker. If you are building a 1/72-scale kit you can glue the control cable to the tip of the control horn and for larger scales use a number 11 X-Acto blade to notch out the surface and then use a triangle shaped micro file to make the notch deeper. I like to drill a hole into the control horn or at least notch out the tip. Insert the control cable into the fuselage and then glue it to the control horn. For control cables that protrude from the wing you will need to form fit these into place using the same technique that I described for form fitting flying wires.

If the model has no control horns you can add these using tiny lengths of plastic strips. Be sure that you locate the control horns on both sides of the rudder and on the ailerons so that they are at the same locations. The edges and the tops of the control horns should be tapered and on 1/48 scale and 1/72 scale you can use small plastic rod to simulate the control horns. After you have installed all the control cables be sure to add a touch of paint to the tops of the control horns.

ANTENNA WIRES

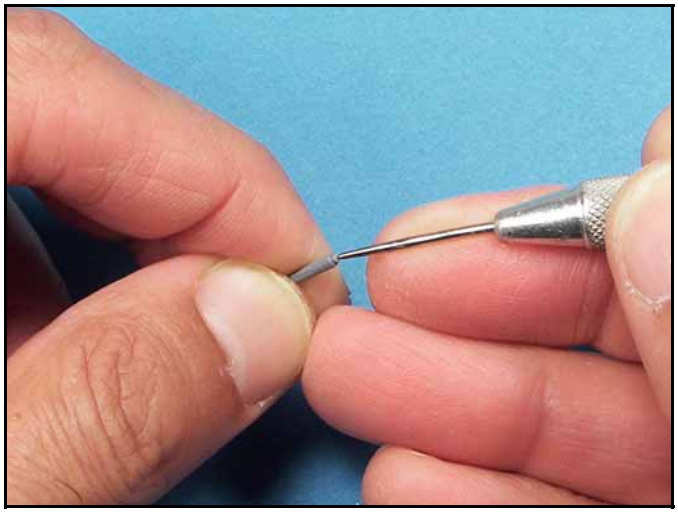
Many types of propeller driven aircraft had some type of wire antenna that extended from a vertical antenna to the tail. World War I planes did not have radios or any type of communications gear so do not add any antennas for these types of aircraft. On the other hand, jet aircraft have no antenna cables, but they do have small metal protrusions, which can receive and send all kinds of electronic signals, can be found on the surfaces of jet aircraft.

For wire antennas I have found that the easiest type of material to work with is clear nylon sewing thread. I recommend using this exclusively for antenna wires. I always start with a length much longer than I need so that I have a lot of thread to work with. For 1/72 scale aircraft use the clear or black thread right off the roll and for 1/48 and 1/32 scale add color to the thread to slightly thicken its appearance with a black or silver sharpie.

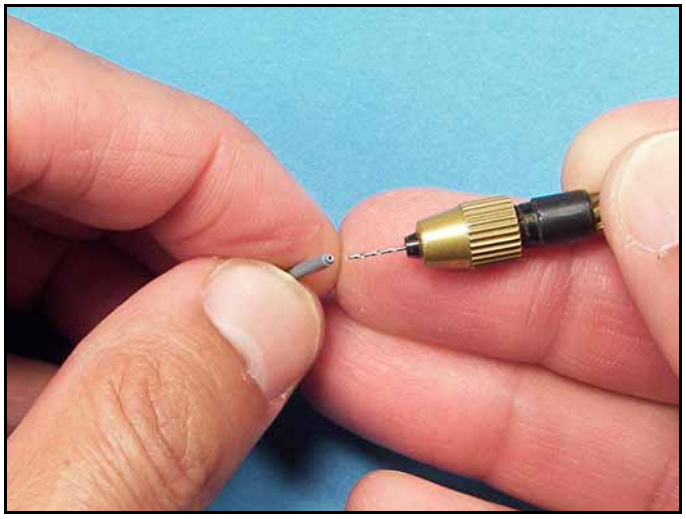
If one end of the antenna wire attaches to the tail and most do, drill a small pilot hole. In most cases the other end will attach to a vertical antenna protruding from the upper area of the fuselage. I like to drill a small hole all the way through the vertical antenna so that I can push the thread all the way through it.

I usually glue the end that attaches to the rudder first by dipping the tip of the thread in a puddle of super glue and then pushing the thread into the hole. It's important to keep the thread as straight as possible until the glue dries which should take less than a minute. I then run the other end of the thread through the hole in the vertical antenna, tension the thread and then tape it to the fuselage. If you need to adjust the tension in the thread simply move the tape. Once I am satisfied with the appearance of the thread I add a small drop of super glue to both sides of the antenna where the thread is, let the glue dry and then cut the thread with the tip of a single edge razor blade. I lightly sand the end where the thread was cut with a sanding stick to contour the glue and then add some touch up paint to the antenna and to the attachment point on the tail. To simulate antenna insulators just add a small drop of white glue, let the glue dry and then color it with a sharpie.

On modern jet aircraft antenna usually take the shape of small, thin squares or rectangles on the fuselage. Square or rectangle shapes can be made from Evergreen or Plastruct plastic strip. Choose a thickness and width that appears to provide a scale appearance and then cut the necessary lengths using your trusty chopper. I like to use my chopper for these types of details because you can easily duplicate lengths when you need a lot of pieces the same size. When you attach these parts the trick is to be sure they are straight. If you have steady hands you can attach them with super glue but I like to use tiny quantities of Testors tube glue so that I have some working time to get the small part positioned correctly.

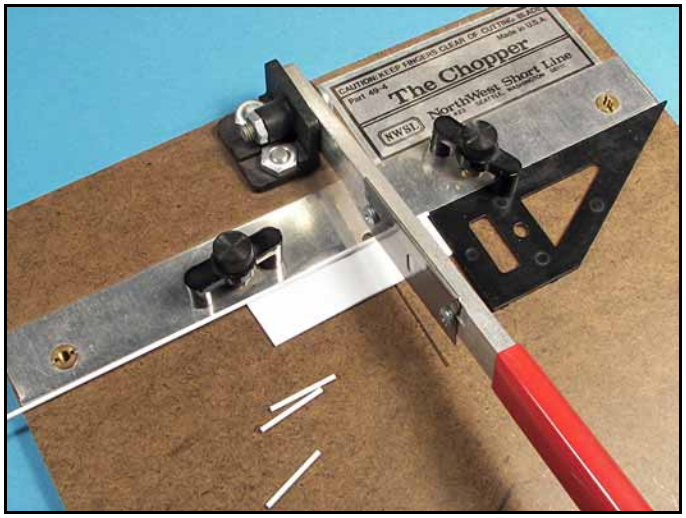


The first step in hollowing out kit supplied guns is to set an indentation in the center with a needle scriber. This will prevent the drill bit from skewing off to the side.

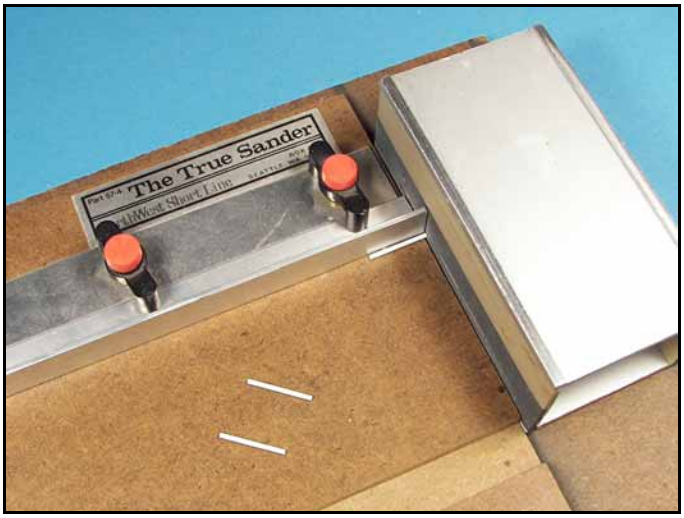


Start drilling with a small diameter bit and work up to the size opening that you want using progressively larger drill bits. By taking this stepped approach you can achieve very thin walls without collapsing the plastic.

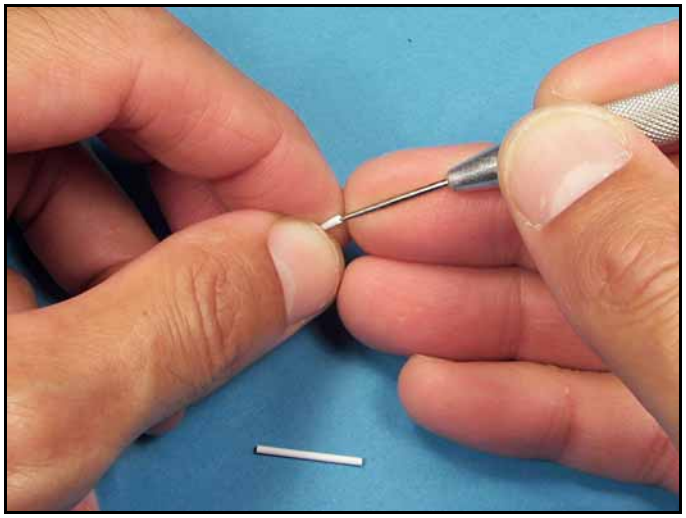
This machine gun assembly is from the kit. Notice how the gun metal color has a shiny appearance on the raised surfaces which gives the gun a two tone look. The gun was painted and then polished with a Q-Tip.



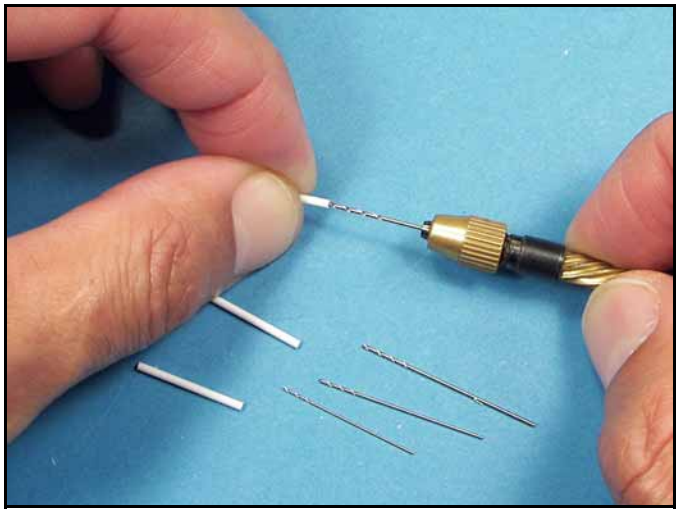
The first step in making gun barrels is to cut several lengths using your Northwest Shortline Chopper. I always cut more lengths than I need so that I will have some spares.



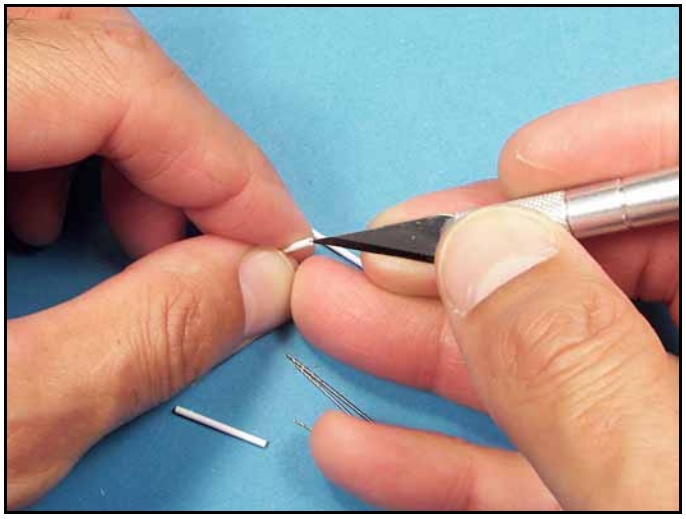
Next you will need to flatten the surfaces that will be drilled out. I use a Northwest Shortline True Sander for these small jobs. I like to use Plastruct round stock for making gun barrels.



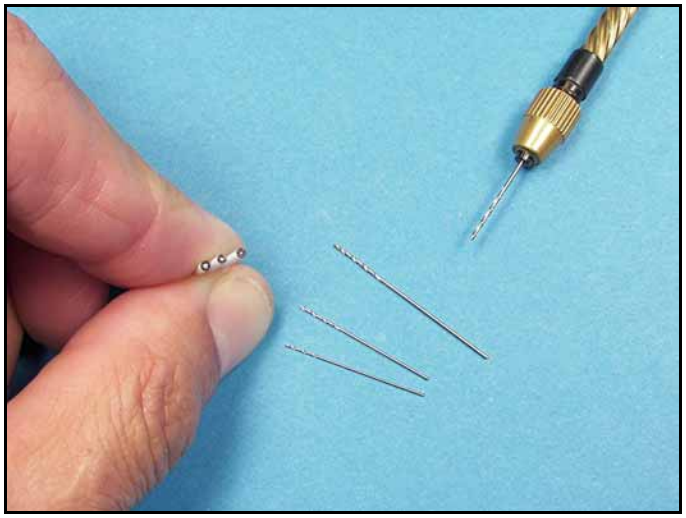
Here again you will need to indent the ends in the center so that the first drill bit will set correctly. If the hole is off center you can usually correct it by going to the next high bit size and drilling at an angle.



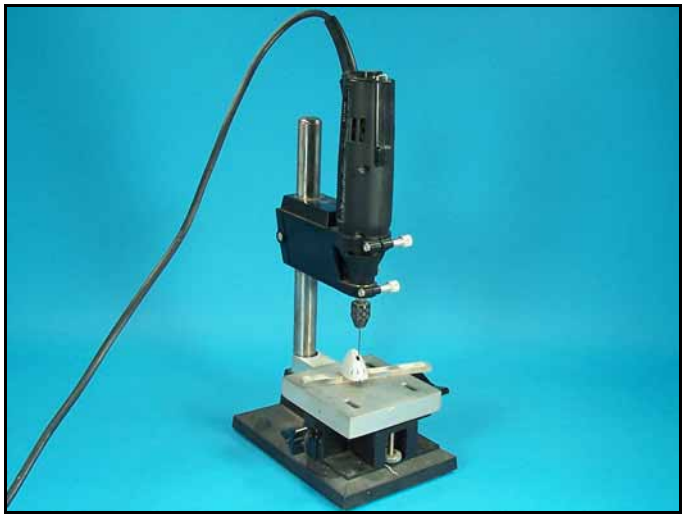
I like to use a twist drill for all my hand drilling. Holding the round stock firmly will help ensure that the drill bits will set correctly as you turn the twist drill.



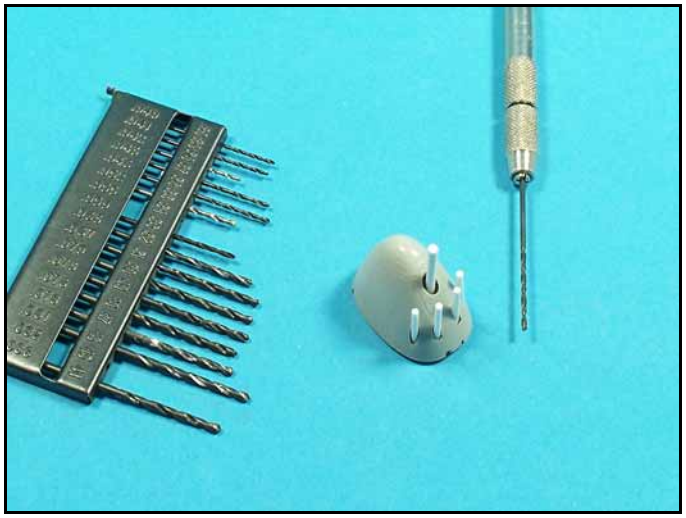
Another method for correcting an off centered hole is to carefully peel away the excess plastic using the tip of a number 11 X-Acto blade.



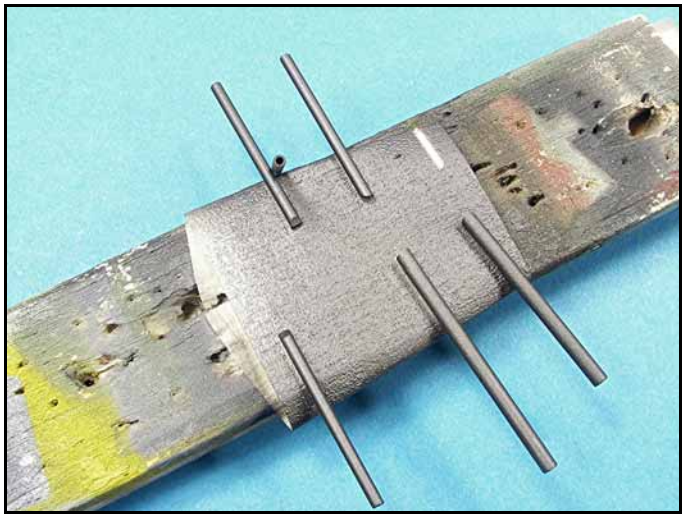
Here are the stages for hollowing out the tips of the plastic. You can clearly see how the holes get bigger with progressively larger bits.



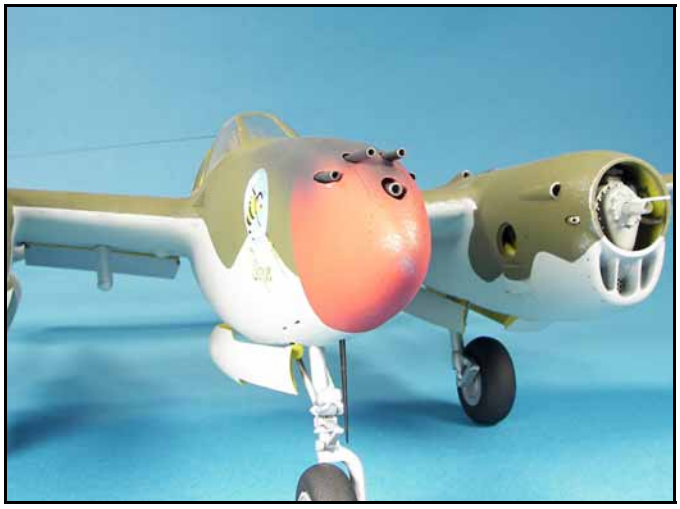
I glued a backing into the inside of the P-38 fuselage tip so that the gun barrels would sit straight and level. I used my trusty Dremel drill press to set the holes in the backing to ensure that they would be positioned correctly.



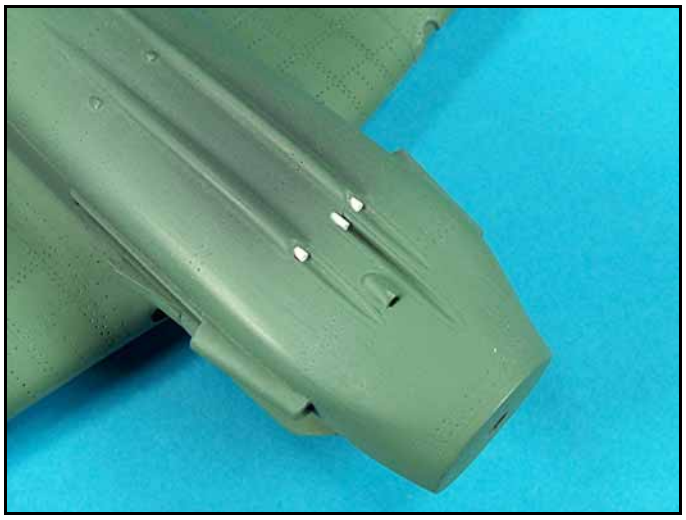
The backing was two layers with some space in between each layer so that when I inserted the new barrels into place they would have a positive seating.



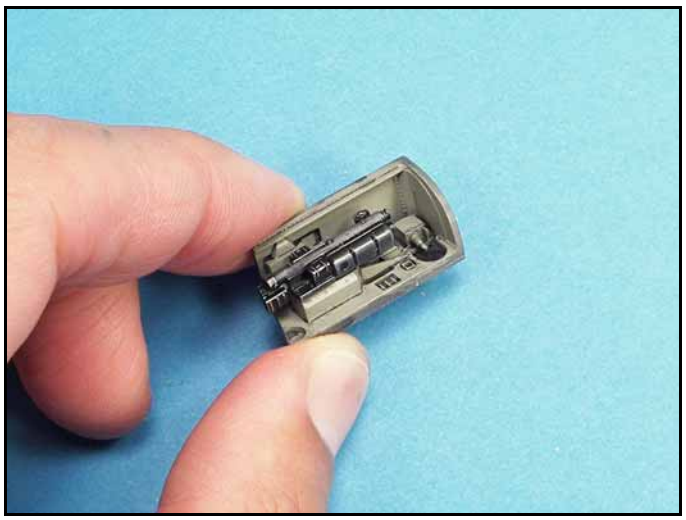
The new barrels for my P-38 are ready to go. They have been airbrushed with Testors gun metal and lightly polished with a Q-Tip.



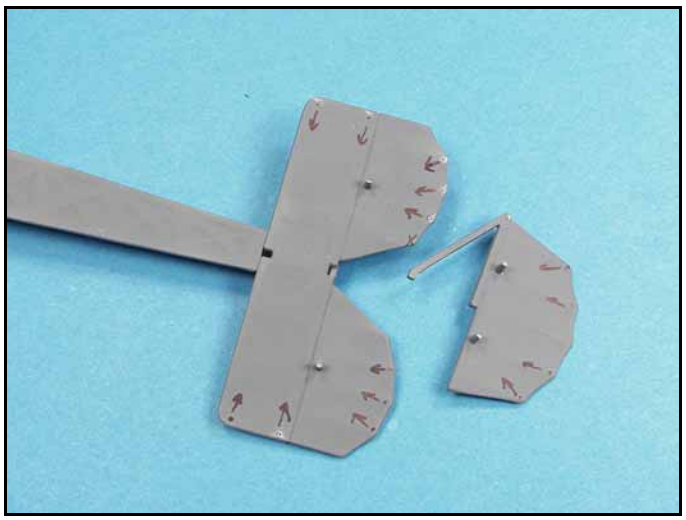
Here you can see a good example of how thin you can get the plastic walls to be. The 20mm gun as well as the 50 caliber machine guns look pretty convincing.



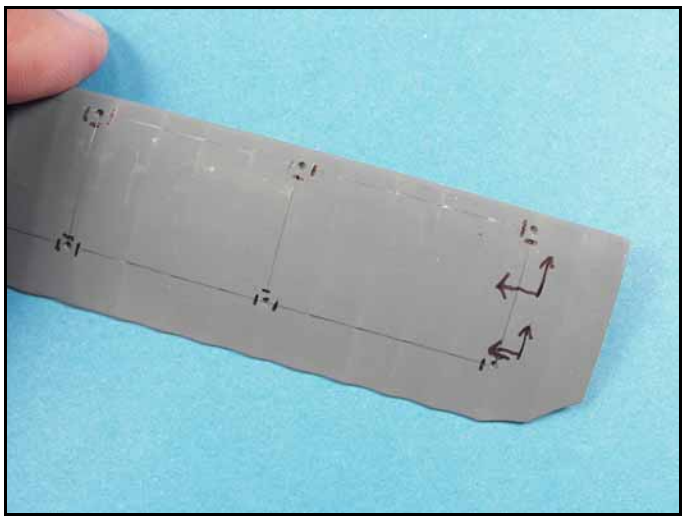
It is always a good idea to check the fit of scratchbuilt gun barrels. I had to sand down the diameters of these barrels until I could get them to slide in and out of their locations.



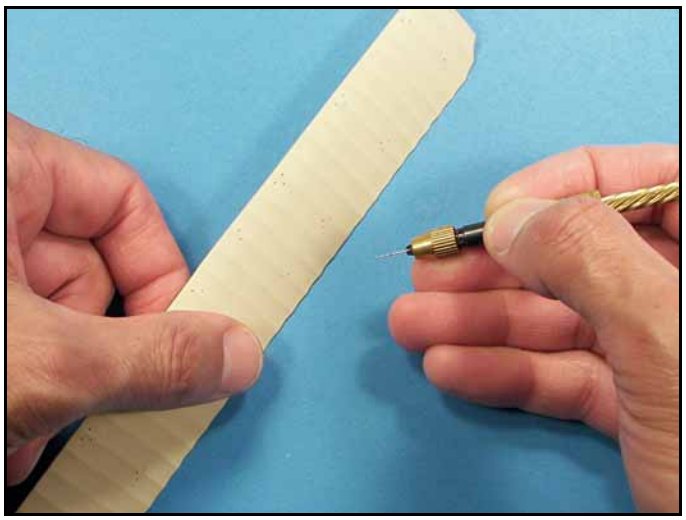
If you decide to open up the gun bays on your model be sure to carefully paint all the details. This gun bay belongs to a 1/32 scale He-162 Salamander. Model by Scott Weller.



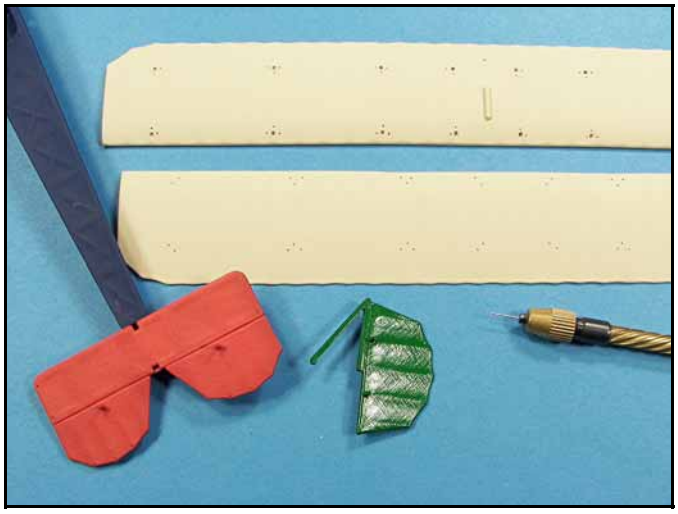
When setting the tail surface rigging on biplanes I like to set the locations and detail the direction of the rigging on the model. I then make notes on the instructions so that I can refer to them when I am ready to rig the model.



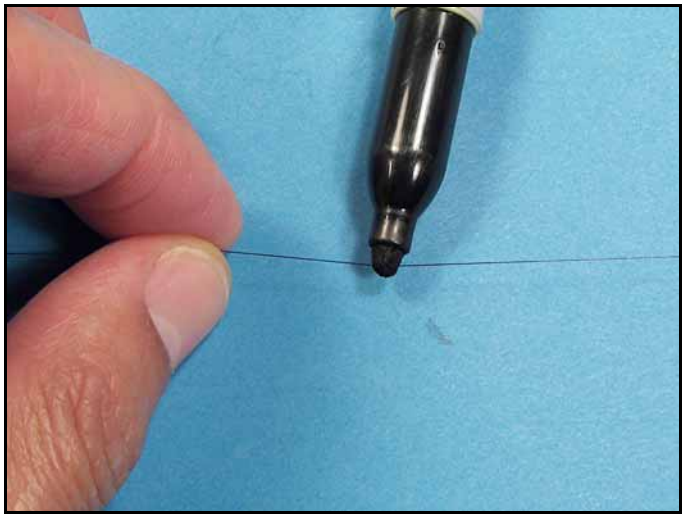
Setting the rigging on the wings can be very challenging especially when the manufacturer did not provide any locations to work from. I measured the locations using my trusty 6 inch ruler and then drilled the holes through the wings.



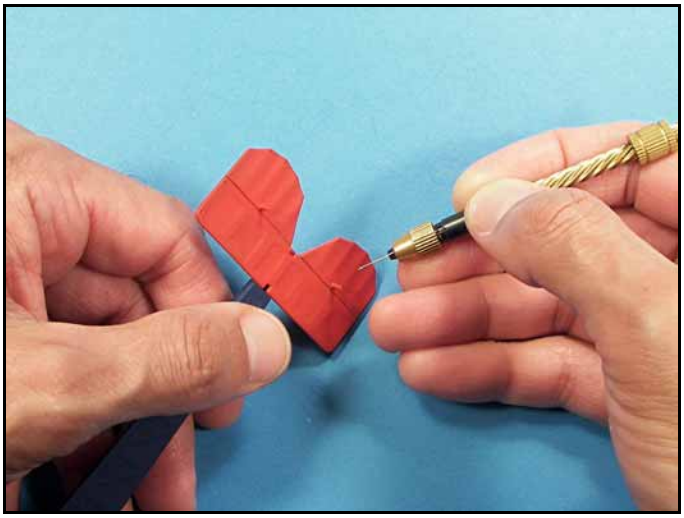
After you paint the wings you will need to clear out paint from the tiny rigging holes. Also be sure that when you drill the holes that they are angled in the same direction as the rigging.



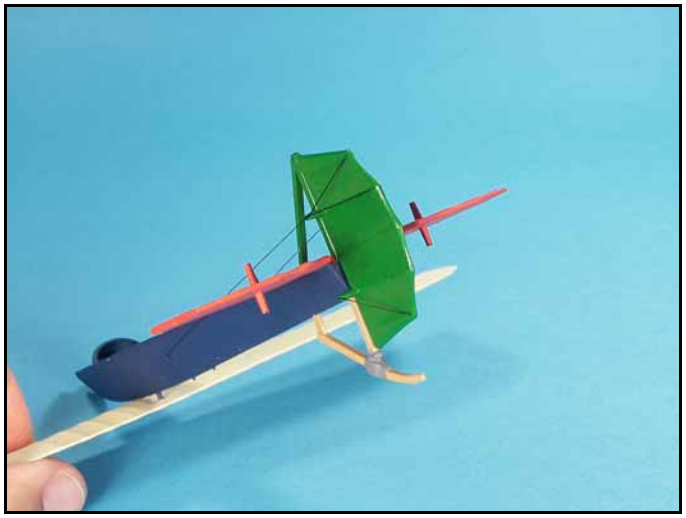
All these parts have been re-drilled to make sure the rigging holes are clear of paint. This can be very tedious so go slow and be very careful not to scrape the paint.



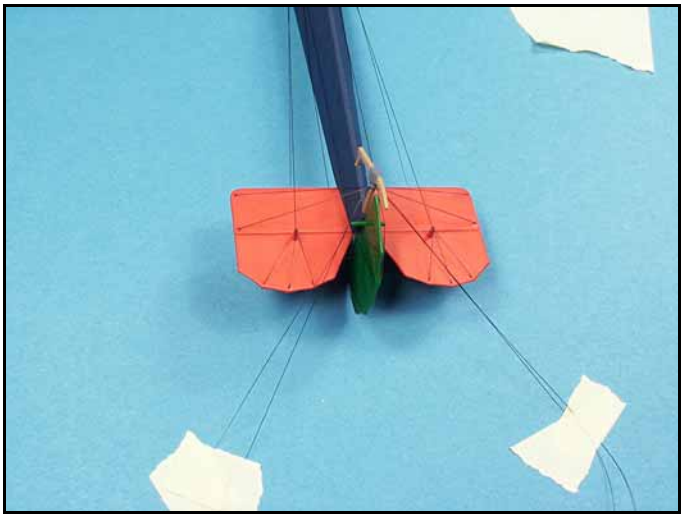
For 1/48 scale bi-plane rigging I use clear nylon sewing thread paint with an indelible marker. I let each coat dry and give each length of thread several passes to be sure that the thread is completely painted.



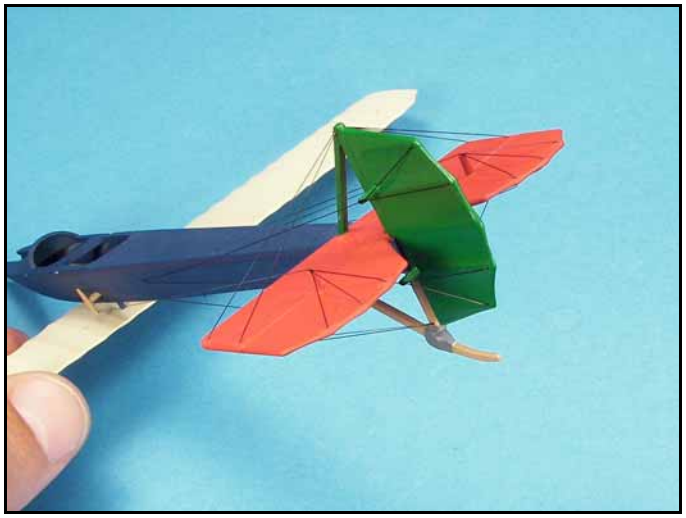
Even after I checked and rechecked the individual rigging holes I still found a few that needed to be cleared more than once. The holes are so small that even loose paint particles can clog a hole up.



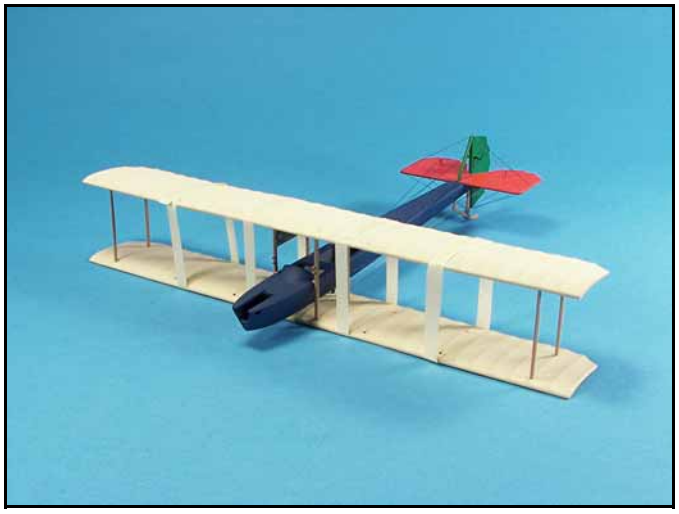
The secret to clean looking rigging is to plan your work and go slow. Check each installation to be sure that it is symmetric and that there is no sag in the lines.



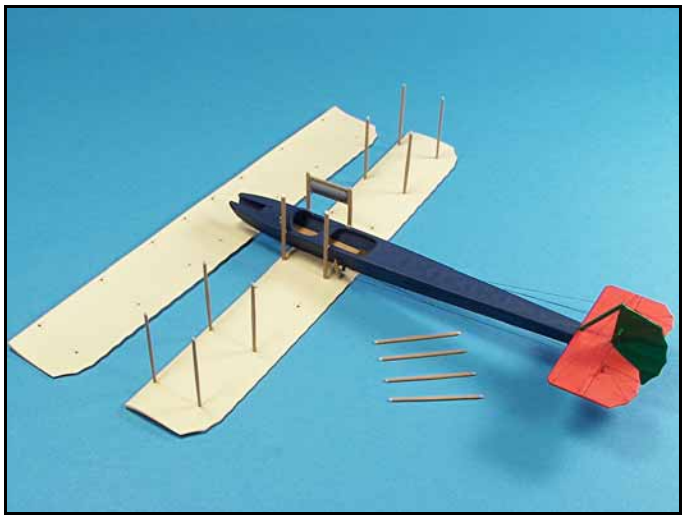
The rigging on the tail section is progressing nicely. Where possible I like to use masking tape to set the tension on the rigging, glue them in place and then trim off the excess.



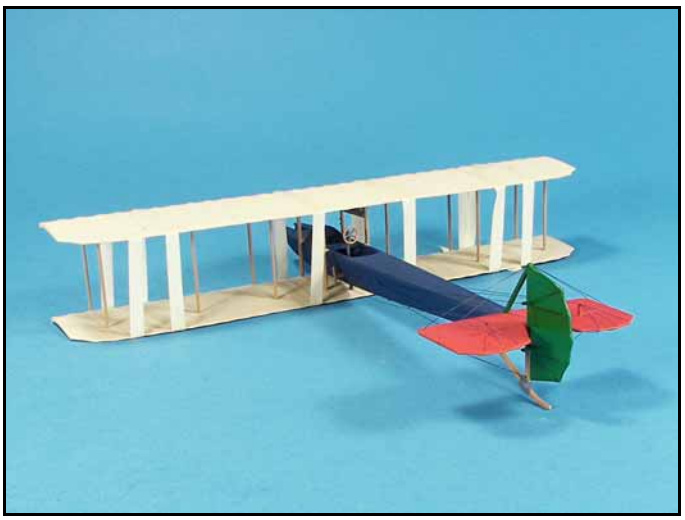
The tail rigging is now complete. The tips of the control horns for the elevator and the rudder were carefully notched out so the rigging would sit correctly.



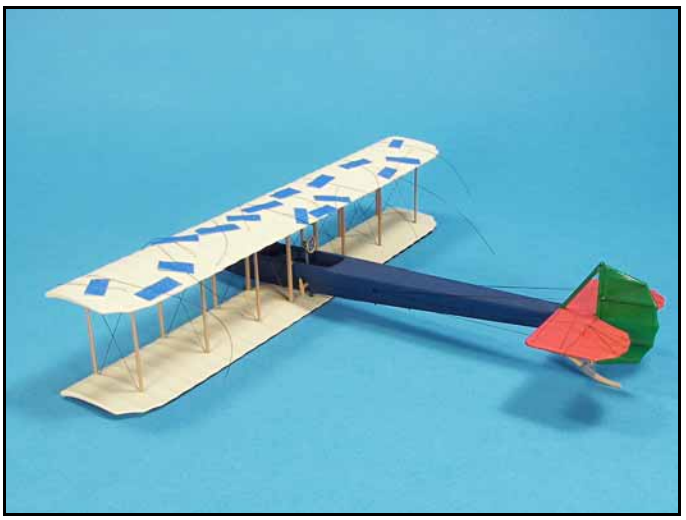
To set the individual struts on this model I set the center and outer ones first and then carefully taped the wings together with thin strips of masking tape. This allows me to adjust the positioning of the upper wing and the struts.



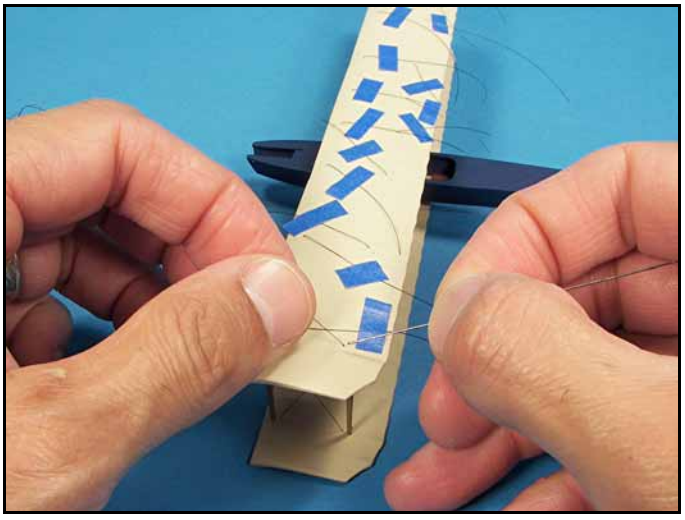
I use tiny drops of super glue to set the struts on the lower wing and I add more struts and progress from the outside towards the fuselage. I set the struts, re-taped the wings and then glued the struts in place.



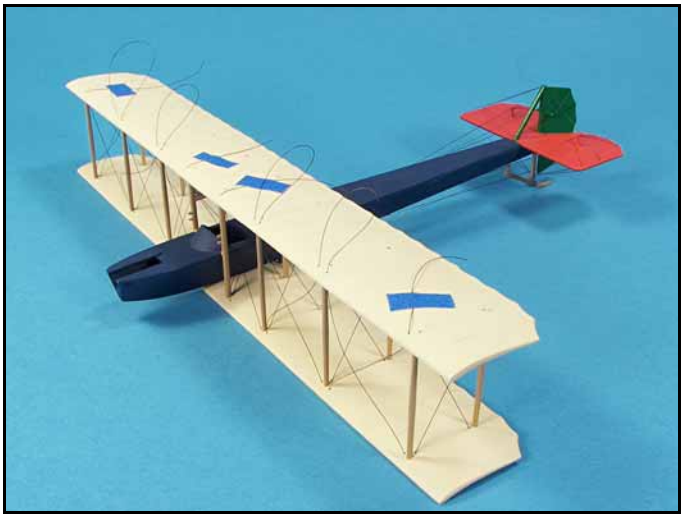
Now that all the struts are glued in place and I am satisfied with the positioning of the struts and the upper wing, I glue the struts to the upper wing. I add tiny drops of white glue to the strut/ wing attachment points to fill any voids.



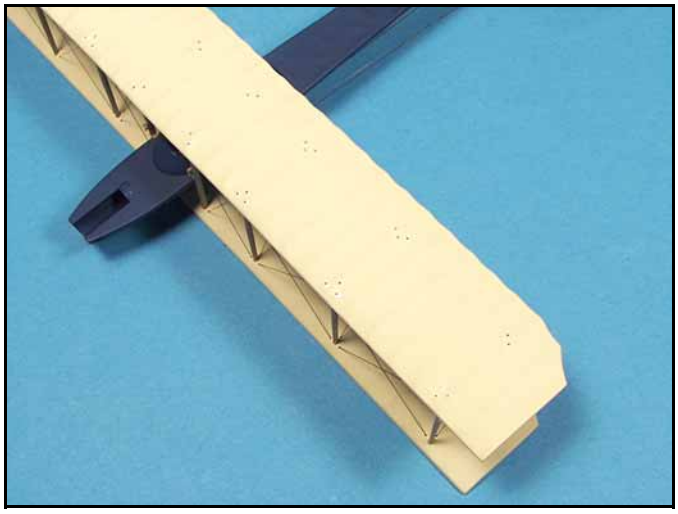
I like to do the front to back rigging between the struts first. Each length is threaded through its respective hole. One end is taped, the line pulled taught and then the other end taped. I check my work and then start gluing.



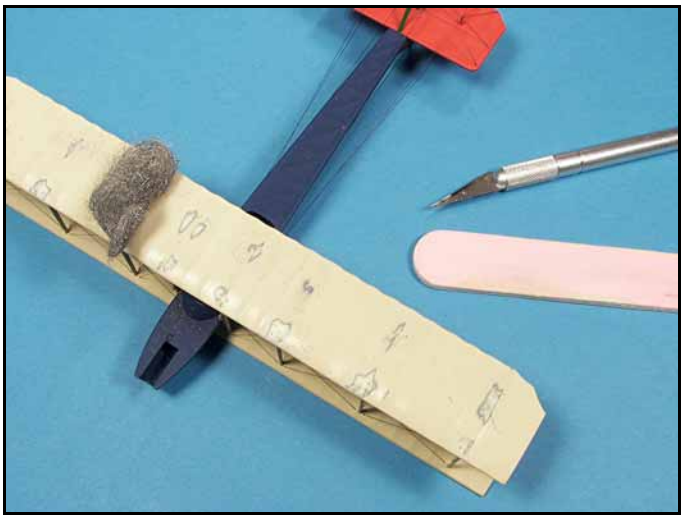
Each length is carefully glued with a tiny drop of glue at each hole location. I remove the tape from one side, pull the line taught and glue it in place. Once the glue has set I repeat the process for the other end. I then trim the excess line.



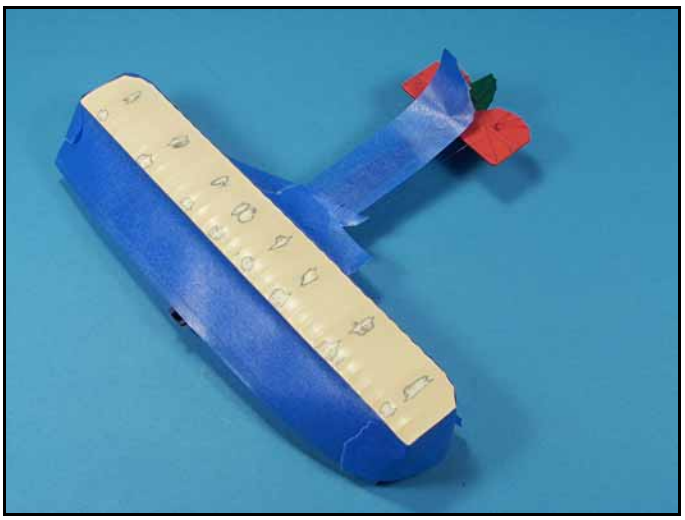
Next I sew the rigging from the outer edges of the wing towards the fuselage leaving large loops. I check my work and then begin gluing. The loops are for pulling the lines taught as you glue.



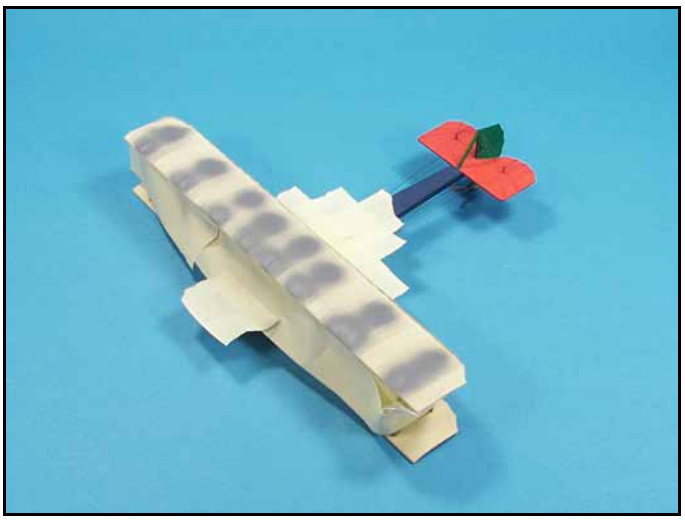
Once all the rigging is glued I trim off the excess line and then add more super glue to each hole location in the upper lower wing.



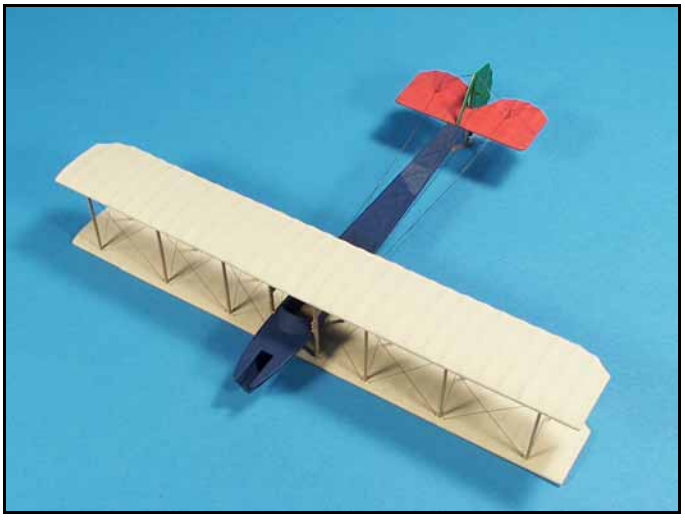
I carefully sanded each hole location and add more glue if necessary. Once I am satisfied that the holes are filled and sanded smooth I polish the areas with 0000 steel wool.



I carefully mask the wing areas and the fuselage to prevent any over spray. To prevent the tape from sticking to the rigging, I double layered the tape leaving a 1/8 inch gap on the sticky side to attach to the wing.

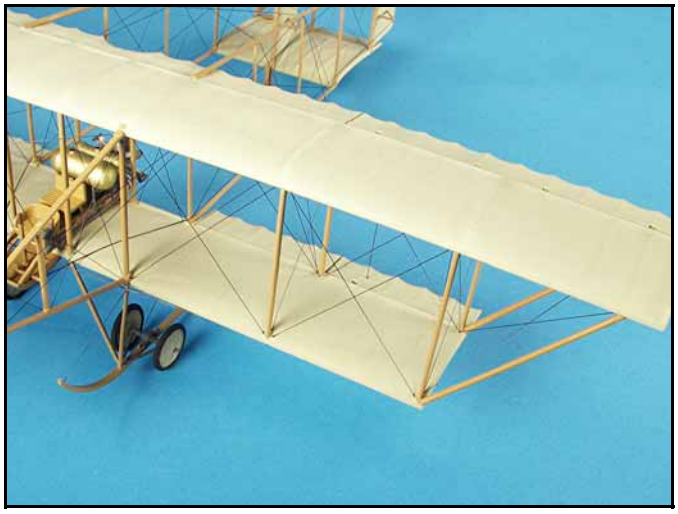


The blue masking tape did not stick well so I used my trusty cream colored tape. The areas I sanded and polished were given a light coat of primer to cover the bare plastic and to blend the areas into the surround paint color.

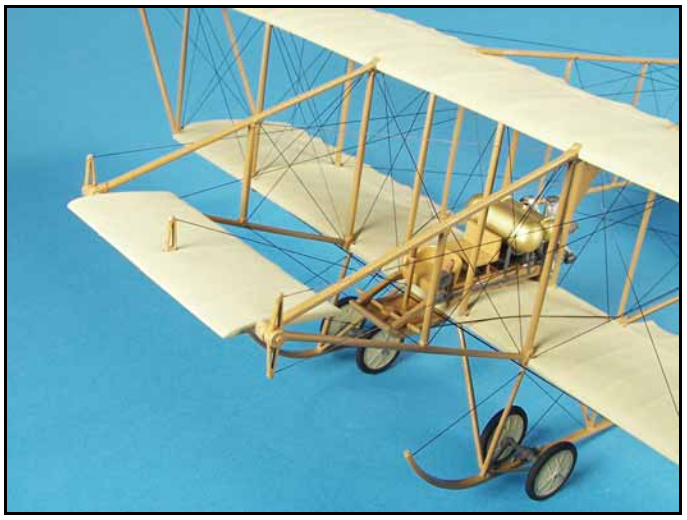


The upper and lower wings were then given their finished coats of paint. Polishing the areas that were sanded with 000 steel wool blends in the painted and unpainted areas resulting in a smooth surface appearance.

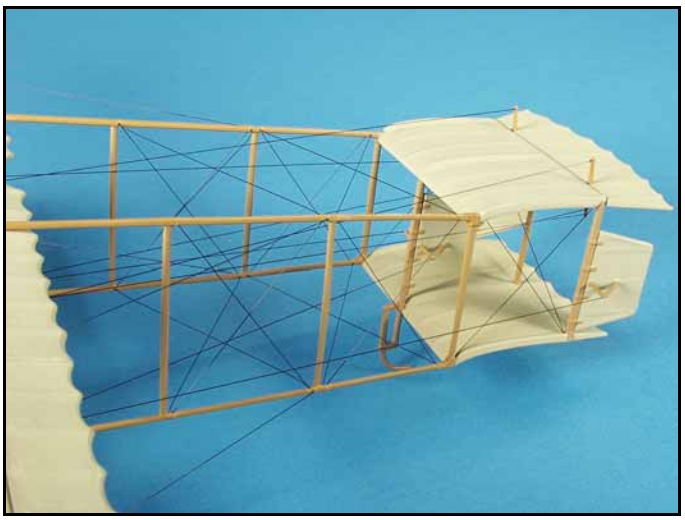
The rigging on this model looks really good. All the lines are tight and they are symmetric. Even though this kit is over 50 years old, with a little bit of work and a good paint job you can turn this model into a real eye catcher.



The rigging on this 1/48 scale Bristol Boxkite is a bit more elaborate but here again the effect is well worth the effort.

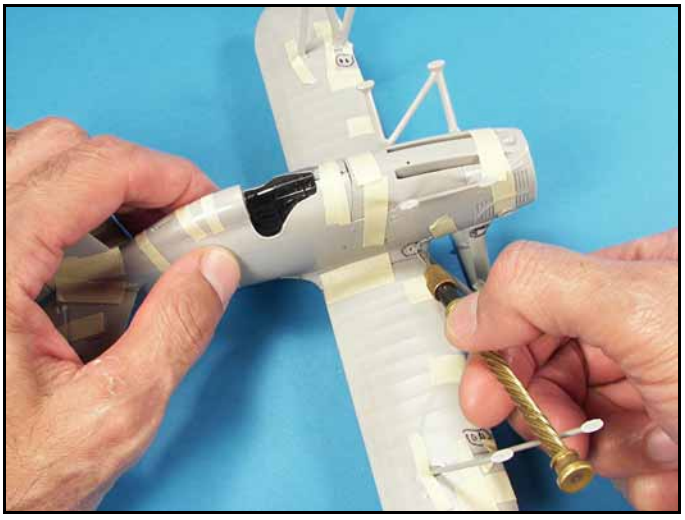


The control horn rigging is all connected to the control stick. For rigging reference I watched the movie "**Those Magnificent Men in their Flying Machines**"

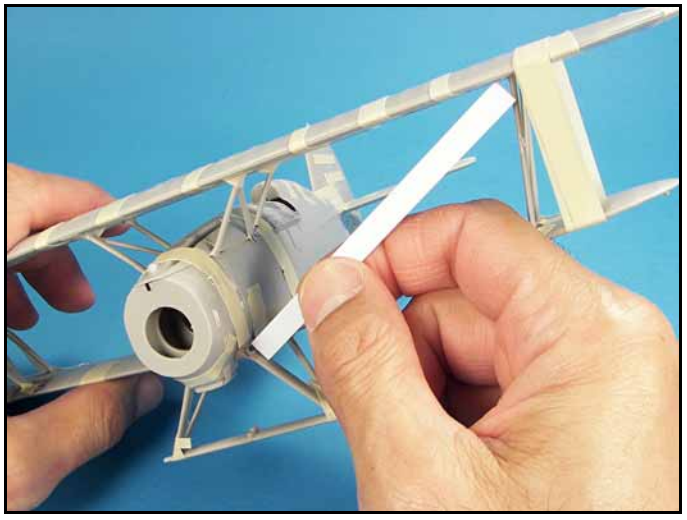


To rig the framing I drilled tiny holes in the plastic at the connection points with a number 80 (.0135 inch) drill bit. Once the rigging was glued into place it actually made the framing stronger and easier to handle.

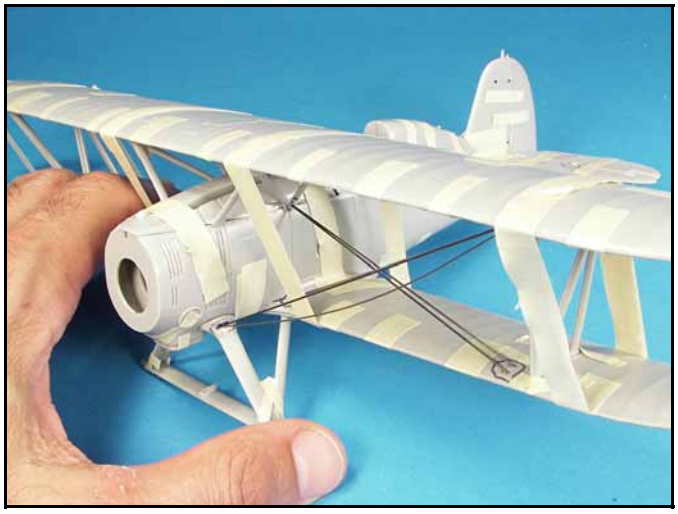
Large scale kits like this Hasegawa 1/32 scale biplane are easier to rig but you still have to do some planning to ensure that everything will look symmetric and straight.



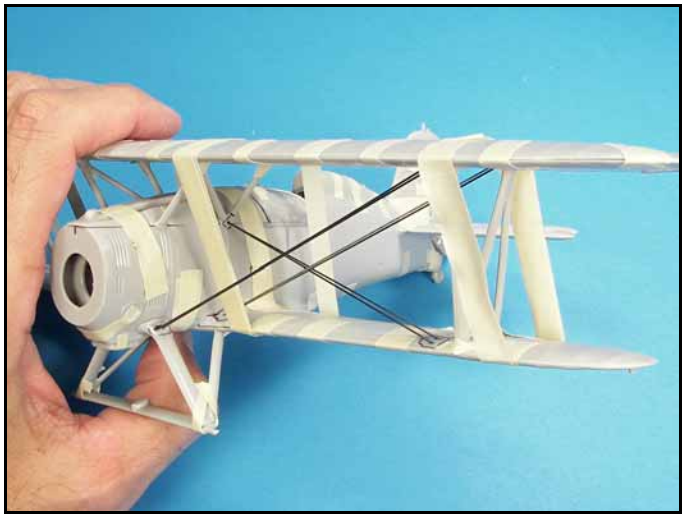
While the kit had some of the rigging locations indented I drilled them deeper and made sure that the angles of the holes matched the direction of the rigging.



I used a length is plastic to get the approximate length of each length of rigging. For large scale kits I use stiff wire for rigging and I always cut longer lengths that are needed.

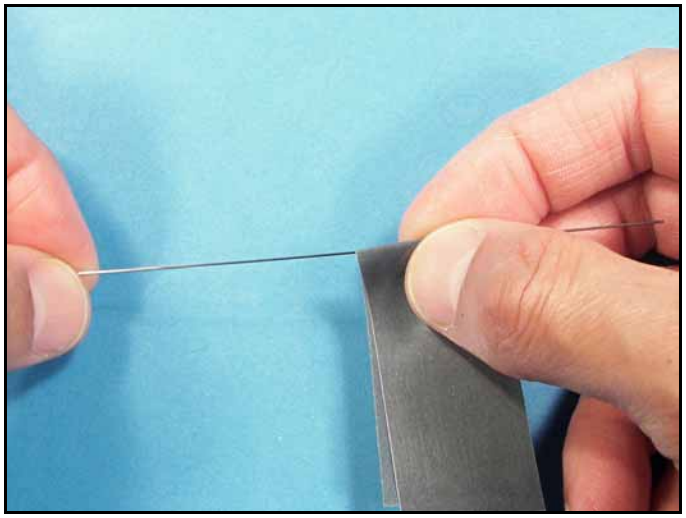


I carefully form fit each length of wire into place by trimming off small lengths at a time until the wire fits correctly. The stiff wire will bow easily and this provides a visual check on getting a snug fit.

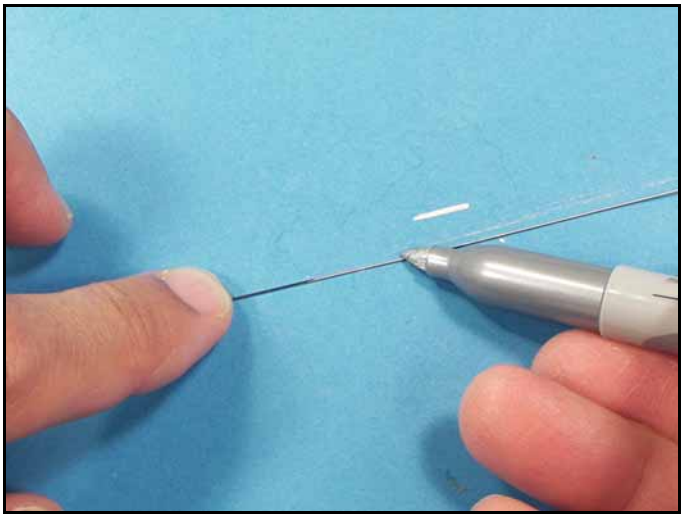


The last length of wire has been trimmed and form fitted into place. Note how even and straight the wires look.

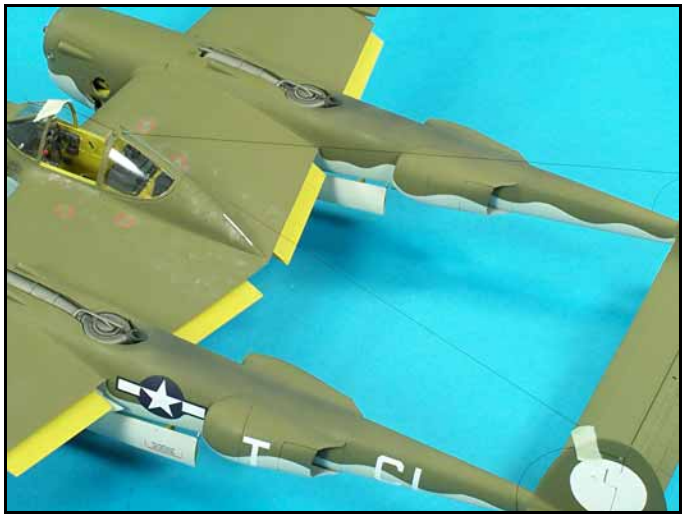
The two aft sets of wires actually cross one another, yet they do not distort each others shape by pushing against one another. By form fitting each length in place you can ensure that the wires do not impact one another.



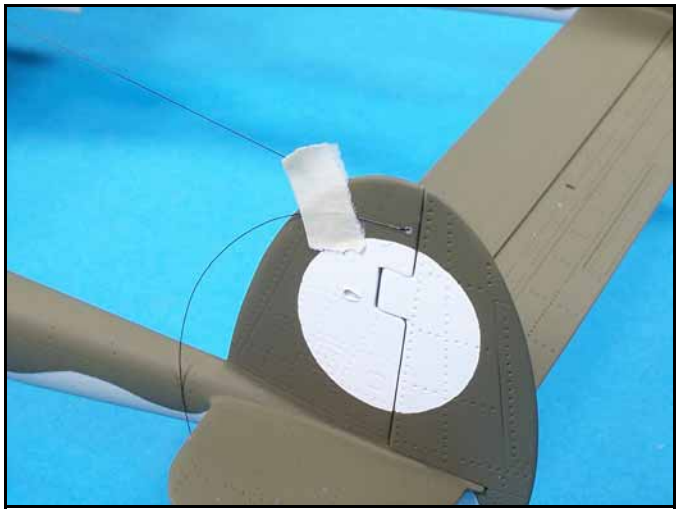
The individual lengths of wire should be sanded to make them smooth and to remove an dirt or surface rust that may have formed on them.



I like to use a silver colored sharpie to paint stiff wire for rigging. Its much easier to just roll the wire and color it than to try to airbrush it.



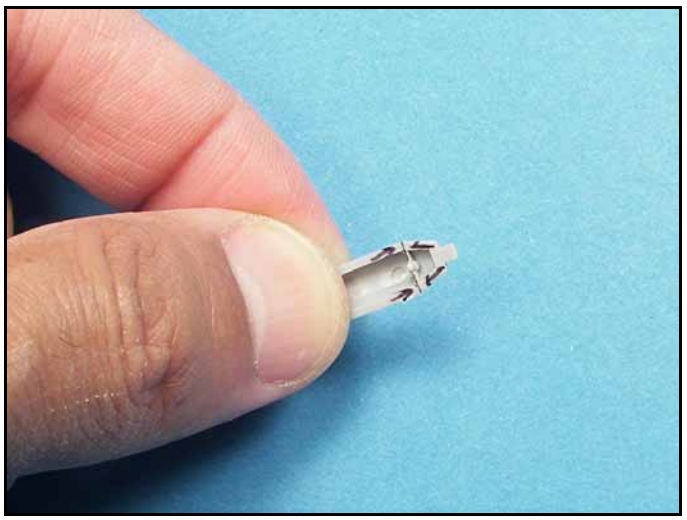
I use nylon sewing thread for antennas and color it the same way as flying wires. I set the antenna wires in place, stretch them taught, tape them, then I add tiny drops of super glue.



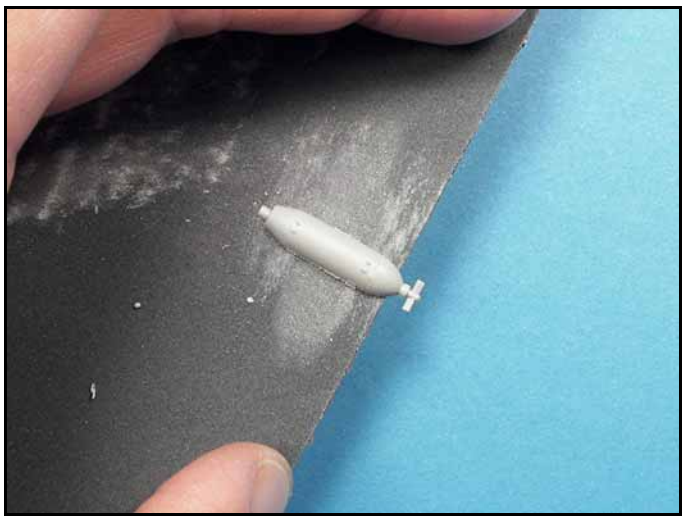
I drilled tiny holes through the rudders on this P-38 using a number 80 (.0135 inch) bit. After the glue dried I trimmed the thread, filed the hole with a tiny drop of white glue and then touched up the dried glue.

On this SBD I drilled a hole through the antenna post on the tail for the antenna wire. This made it easy to stretch the thread, secure it with tape and glue it in place.

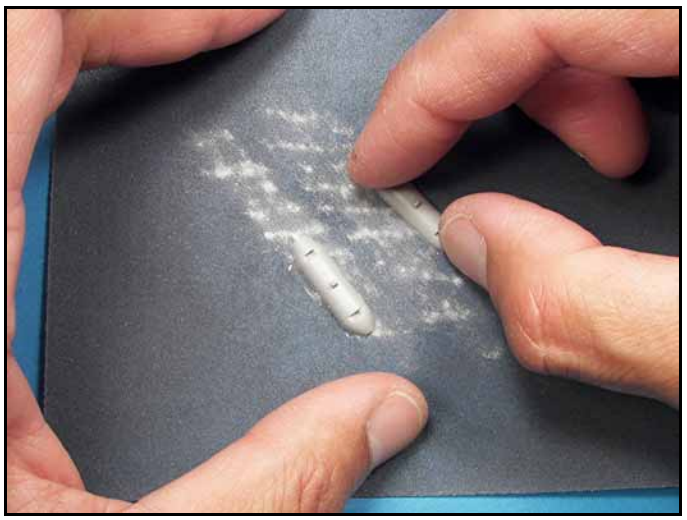
To attach thread lengths, I glue them together on the work bench and then trim the excess off. I use long lengths for these types of antennas. I then thread the lengths into their respective locations and glued them in place.



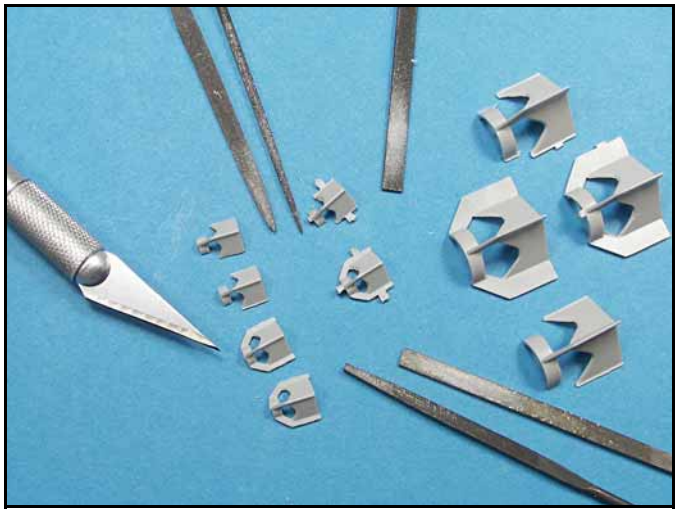
Sometimes small parts like bombs can have uneven gluing surfaces. Check these areas carefully.



To flatten out the gluing surfaces run the parts across sandpaper. Since the front half of the bomb has molded on parts for the other half I ran the part across the edge of the sandpaper to flatten out the gluing surfaces.

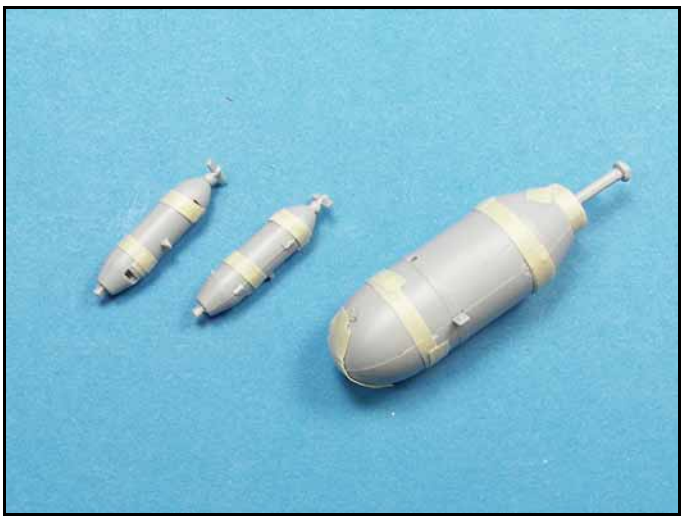


For parts that have flat surfaces use circular or figure eight motions to flatten out the gluing surfaces. One or two passes over the sandpaper should be sufficient.

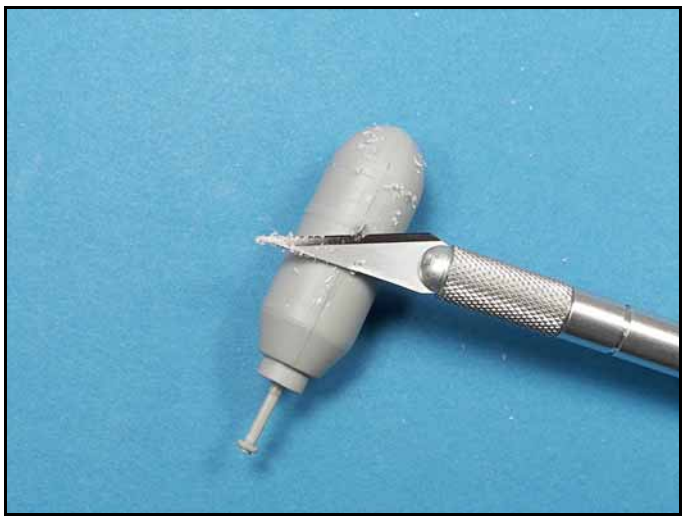


Bomb fin parts usually have some flash that needs to be removed. I use a number 11 blade along with micro files to remove the flash and reshape the plastic.

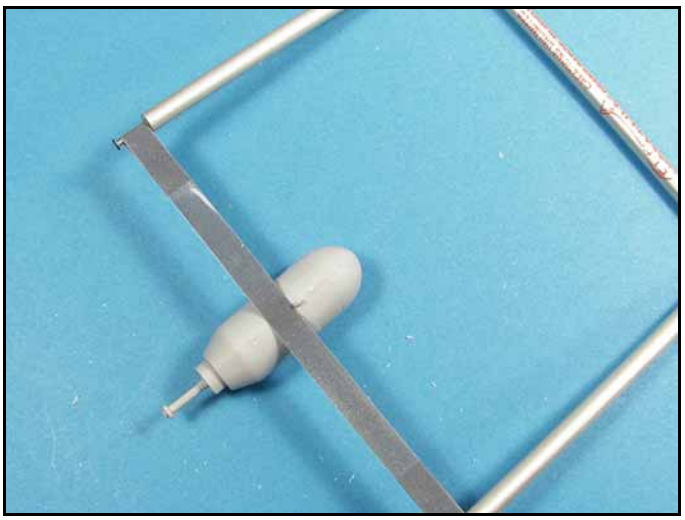
Once the fins are glued together I scraped the glue seam smooth and polish it with 0000 steel wool.



Tape the bombs together with thin strips of masking tape to get the seams tight. Run a bead of super glue along the seam lines.

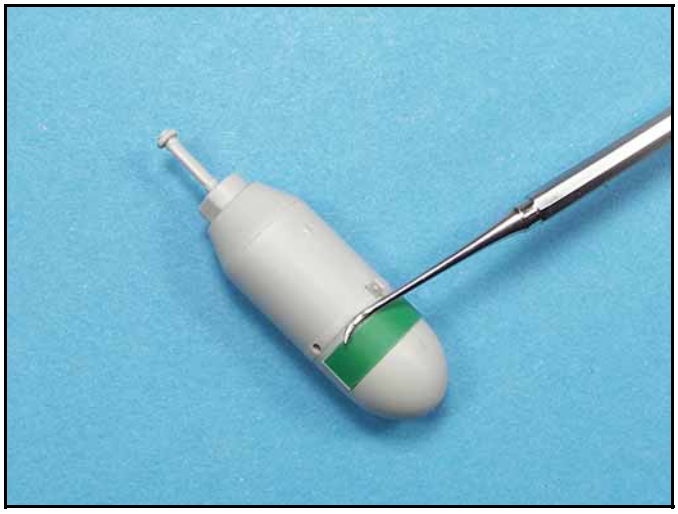


Carefully scrape the seams smooth. Check the seam lines with silver paint and apply more glue where needed. Repeat your seam work with the number 11 X-Acto blade.



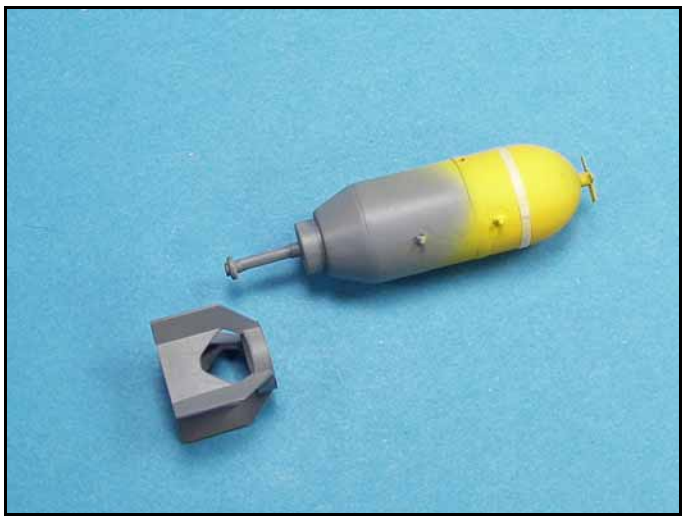
To restore the round shape of the bombs along the seam lines use a Flex-I-File.

Polish the seam lines with 0000 steel wool to remove any scratches in the plastic.



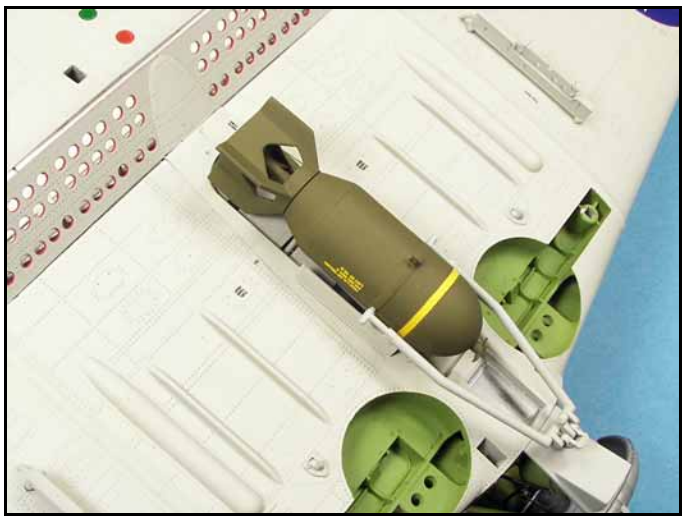
To restore scribed lines, cut thin lengths of labeling tape so that the tape will conform to the curved surface. Carefully scribe the plastic with your plastic scriber.

To ensure that the fins will sit correctly on the bomb, run the attachment area across sandpaper to flatten it out

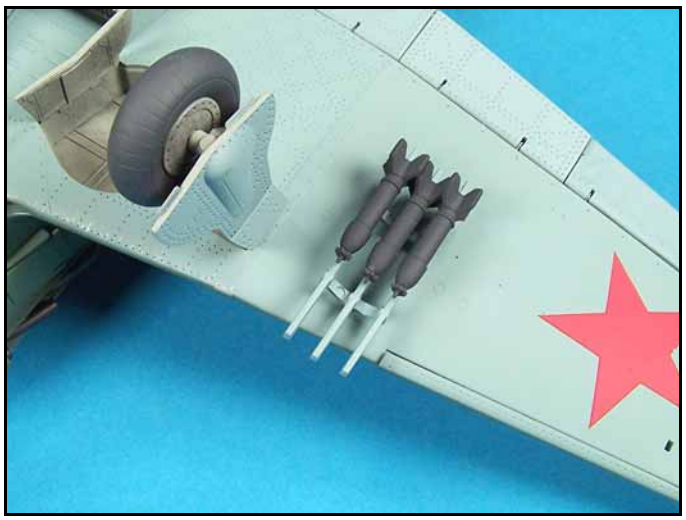


I painted the area that will have the yellow strip, with flat white paint then flat yellow paint. I then masked the area with a thin strip of masking tape.

The bomb is then painted the overall color and then glossed so that the decals will not silver.



The assembled bomb has been given a coat of Testors clear flat paint to restore its appearance. Careful assembly and painting can really enhance the appearance of these parts.



These bombs were painted flat black, but I could have better enhanced their appearance by painting the forward areas a bright color like white or red.