

Improving **MONOGRAM'S**

F-14

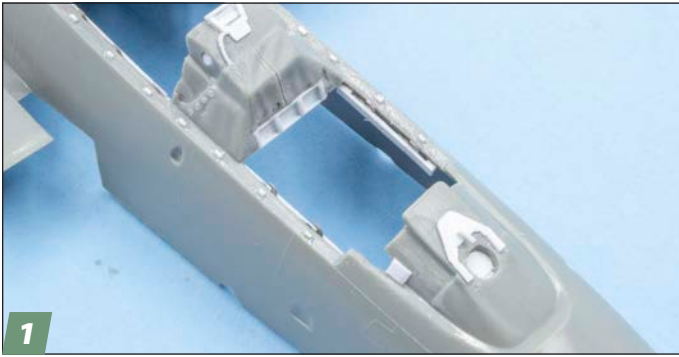


Tips and tricks developed from 99 builds

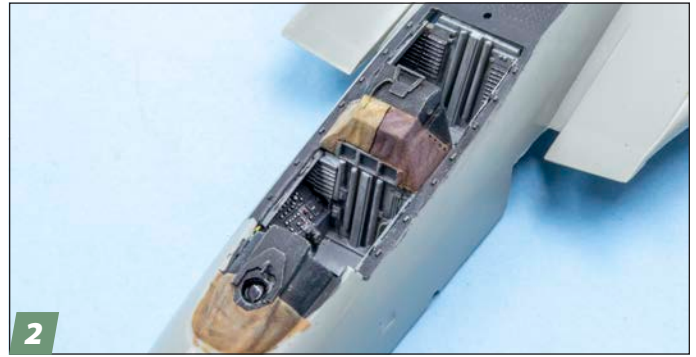
BY DARREN ROBERTS

In *FineScale Modeler* January 2021, I showed how I painted and weathered a Monogram 1/48 scale F-14 to match one at a museum near my house. Usually, I build the Monogram kit without adding much to it, but this build marked a milestone, the 100th Monogram Tomcat I've built since I started modeling at 5. So I wanted to see just how far I could take it, within reason. While it will never compare to the likes of Tamiya's recent F-14, with some TLC, the Monogram kit can still hold its own. Here are the modifications, fixes, and improvements I made.

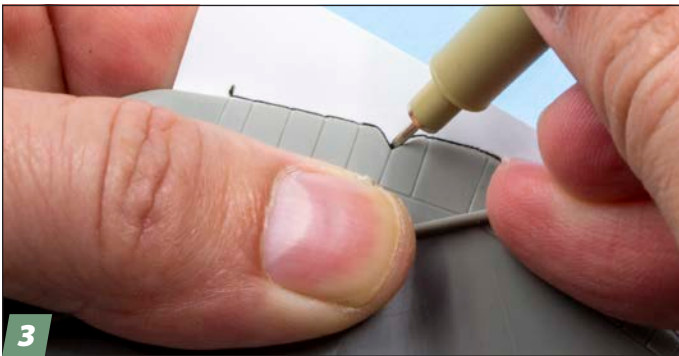




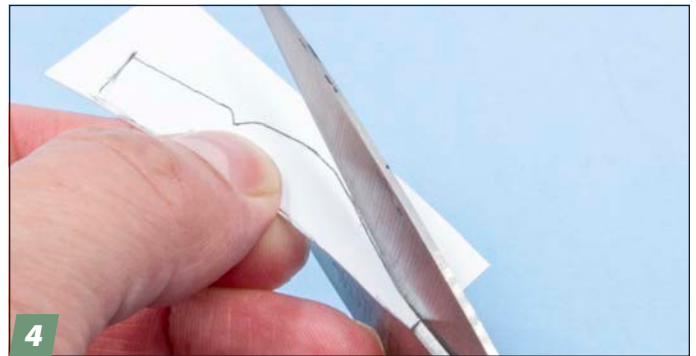
1 I replaced the kit cockpit with a True Details resin set for a quick improvement. Bits of styrene sheet and rod add small details to the sills and shrouds. Archer rivet decals improved the rear deck area.



2 Note that the two colors on the rear instrument panel glare shield. In service, a two-part canvas shroud covered the glare shield, and it was typical for one side to be replaced because of wear — thus darker.



3 Before joining the fuselage, I make wing sweep seals by tracing the outline onto sheet styrene ...



4 ... cut them out ...



5 ... and glue them to the underside of the fuselage ...



6 ... making sure they extend just past the edge. It's a small detail, but it improves the model's final appearance.



7 I filled a hole in the fuselage just under the windscreen designed to locate a probe — only early F-16As had this probe. I glued in similarly sized styrene rod and sanded it smooth.

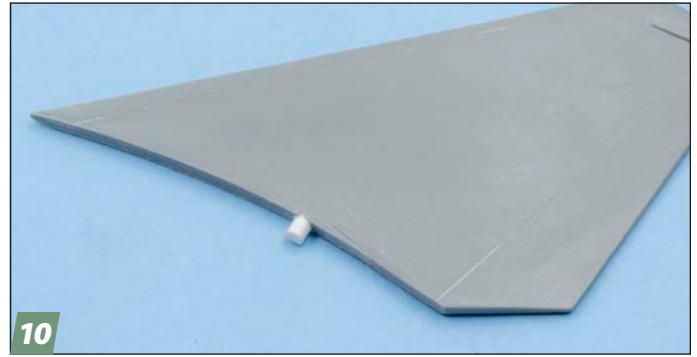


8 Using a hobby knife, I carved an inlet into the fairing just forward of the left vertical tail.



9

Continuing with the upper fuselage half, I separated the molded on horizontal stabilizers by repeatedly drawing a scribe along the edge to gradually thin the plastic.



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After cleaning up the cut ends, I drilled a hole in each stabilizer at the pivot point and glued a short styrene rod into them. With the fuselage together, I drilled corresponding holes to reattach the stabilizers.



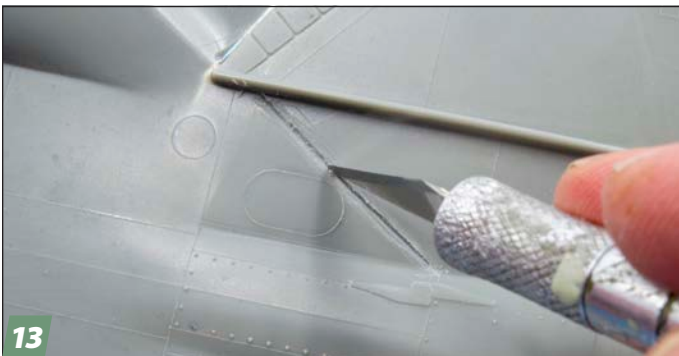
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References of the aircraft I was building showed several reinforcement patches around the airframe. I replicated these with gray self-adhesive vinyl cut to shape.



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I also removed the short blade antenna molded on the spine; I replaced it with a taller TACAN (tactical air navigation) antenna later in the build.



13

Another small detail the Monogram kit missed is the gap between the forward and rear fuselage sections. I scribed it with the back edge of a hobby knife ...



14

... then ran liquid glue over it to smooth the edges. Light sanding finished things off.



15

My final upgrade to the upper fuselage half was to the Environmental Control System (ECS). Each should have nine fins rather than the fine lines molded on the part. I cut the vent out with a scribing tool ...



16

... then smoothed the edges with a metal file after removing the plastic.



17

For the new fins, I cut trapezoidal pieces from styrene sheet ...



18

... and glued them in the openings. Using the trapezoid shape negated the need to measure each piece; instead, I pushed each through until it stopped and applied glue.



19

When the glue on the fins was completely dry, I cut each fin flush with the fuselage ...



20

... and framed each vent with thin styrene strips. I completed the ECS vents by sanding everything flush.



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Turning my attention to the lower fuselage, I thought the detail on the ventral strakes looked a bit soft. So I removed them with a razor saw ...



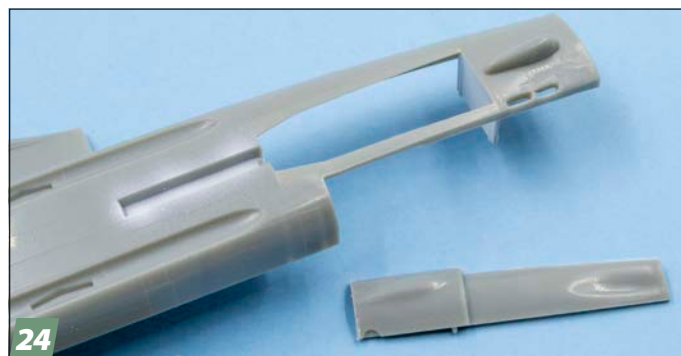
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... and replaced them resin strakes from my company, Steel Beach. I drilled the vent pipe on the tailhook base and added the tow-bar connectors at the rear of each strake with styrene U-channel.



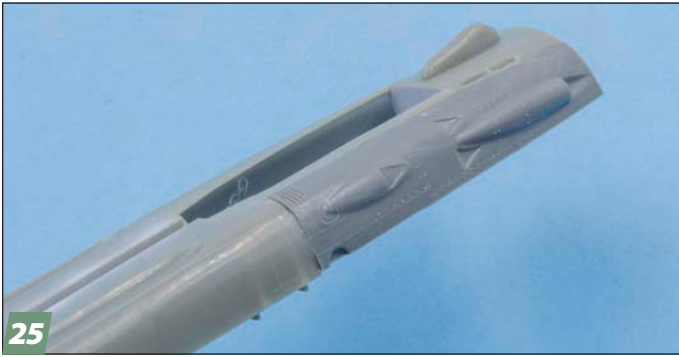
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I drilled out the vents next to the gun muzzle with a pin vise.

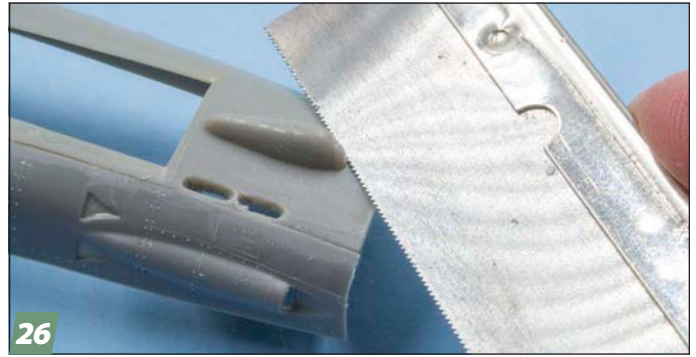


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To change the gun vent from the grilles molded on the kit to the later NACA vents, I used the part from a Revell-Monogram F-14D. The donor part was longer, so I removed some of the fuselage.



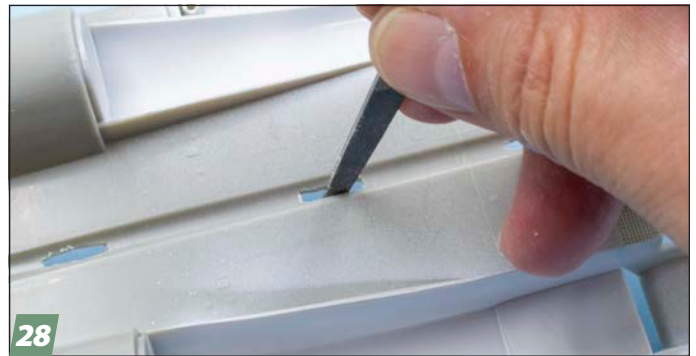
25 Then I glued the new vent in place.



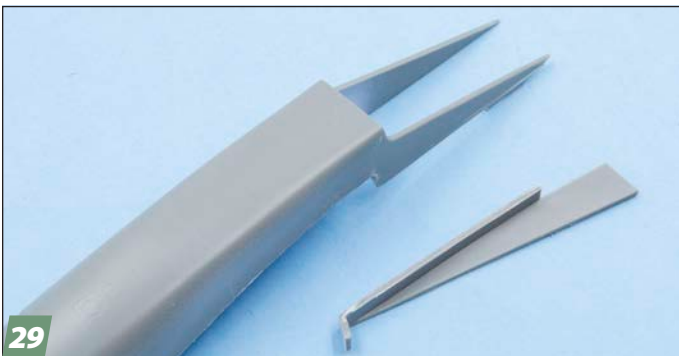
26 I finished the front by slicing off the ALQ-100 sensor forward of the nose gear bay in preparation for replacing it with a TCS pod.



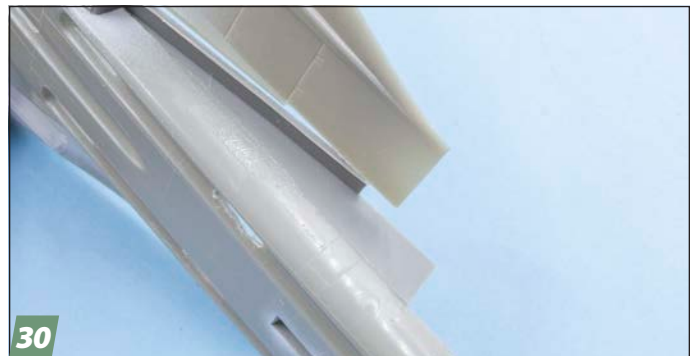
27 Flipping the lower fuselage over, I opened up the cavities for the AIM-7 Sparrow fins using a grinding stone in a rotary tool to remove the tops of the bays ...



28 ... and refining the shape with a fine metal file.



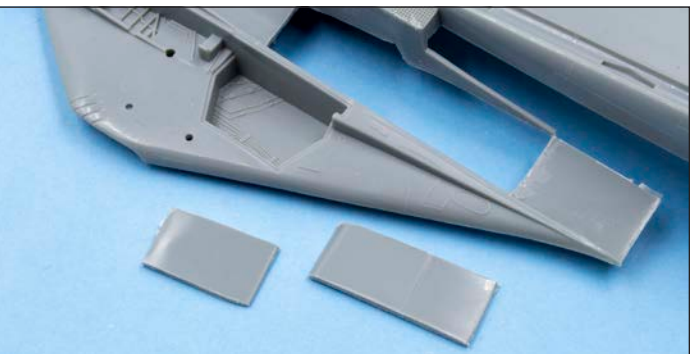
29 One of the strikes against the Monogram Tomcat is the fit, especially of the forward fuselage. The trick I've learned to alleviate some of the problem is to remove the fuselage piece molded to the intake tunnel.

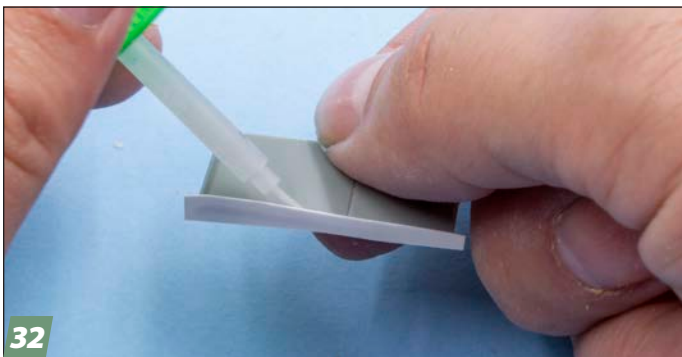


30 I attach these pieces to the lower fuselage before gluing the halves together, which allows me to get a better fit and more easily clean the seams.

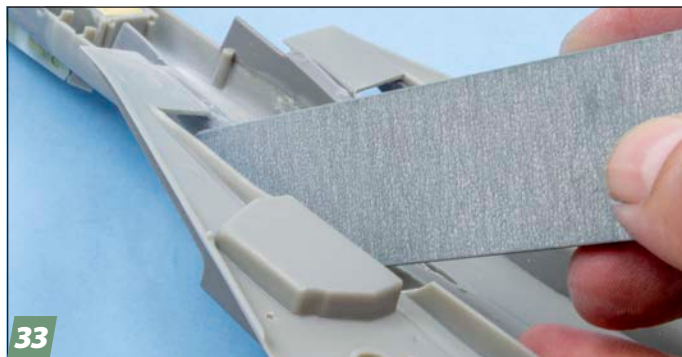


31 I usually close up the fuselage halves without worrying about the intakes because it is nearly impossible to eliminate the seams. This time, in a moment of insanity, I decided to see if I could overcome the fit problems. The main thing preventing cleanup of the intake seams was access, because the intake ramps are in the way. What if I removed the ramps? I began my little experiment by cutting away the ramps with a scribe.





32 Some plastic was lost during cutting, so I glued thin styrene sheet to the edges and sanded it to shape to restore the width of the ramps.



33 After painting the intake tunnels white, I attached them to the fuselage and masked the initial compressor fan area with tissue paper. With the ramps out of the way, it was easy to putty and sand the internal seams.



34 I painted smoothed seams and removed the tissue paper I had used to mask the fans. Now all I had to do was reattach the ramps; thin tabs made of thin styrene support the ramps and help keep them in place.



35 When the tabs were dry, I attached the ramps. While not perfect, it is a vast improvement over other attempts I've made to clean up the intake seams. It also made the ramps look more realistic.



36 I glued the fuselage halves together starting at the rear and working forward. I've found that helps the dodgy fit. Small gaps showed on the forward fuselage, which I filled with styrene shims.



37 Once the halves were together, I drilled the holes for the horizontal stabilizers ...



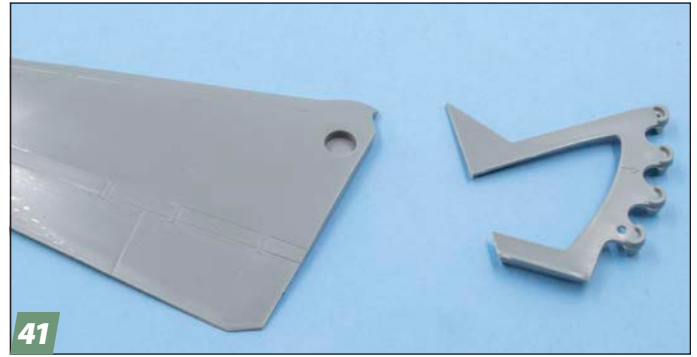
38 ... and hollowed out the fuel dump vent at the tail with a pin vise.



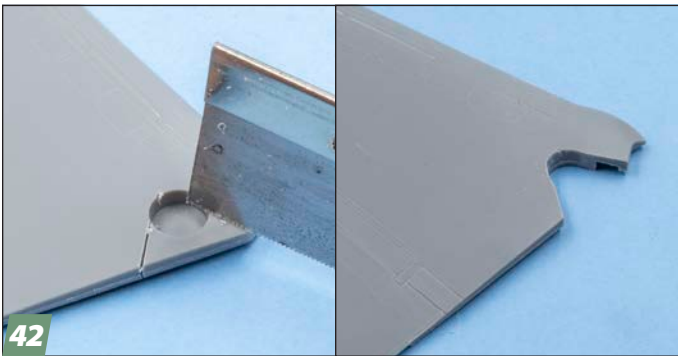
39 Although the model can stand on its gear without it, I always superglue a few small fishing weights into the nose to make sure the model doesn't become a tail sitter.



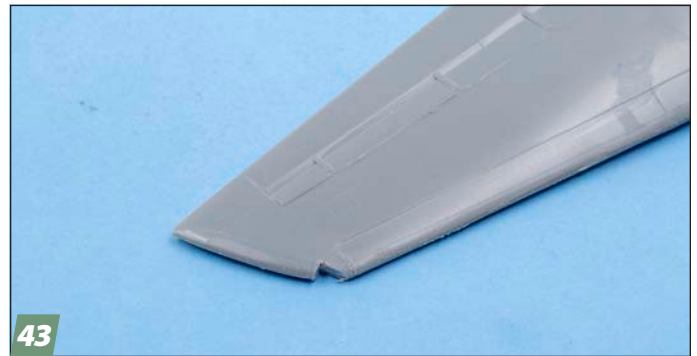
40 After gluing on the nose and sanding the seam smooth, I added a Steel Beach resin TCS pod underneath and a Master turned-metal probe to the tip.



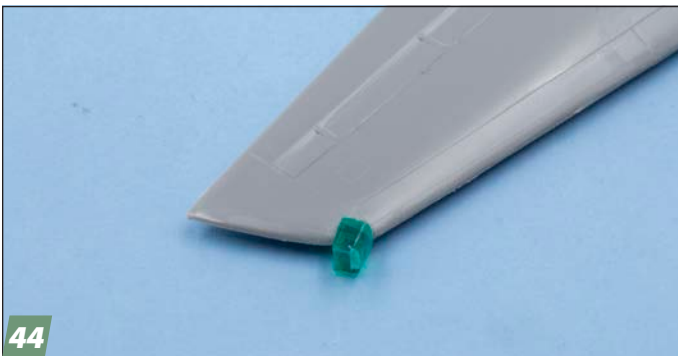
41 The Monogram wings are geared so they can be swung together. While fun, this hinders the build because you have to install the wings before you glue the fuselage halves together. Instead, I remove the gears ...



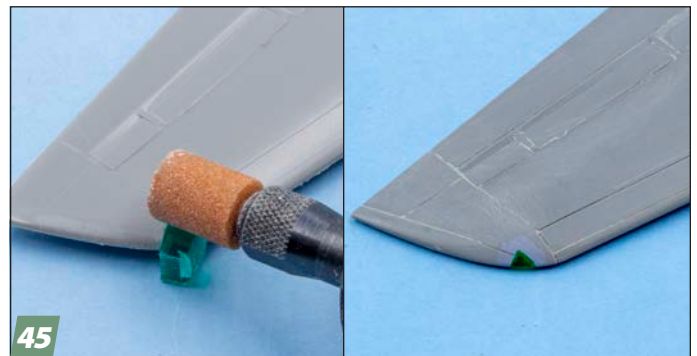
42 ... and cut a notch at the pivot where the wings attach. Now I can slide the wings into place after the fuselage is complete. It's also handy because the wings can slide out for easy storage of the model.



43 I glued the wing halves together. To make the colored navigation lights, I first cut notches in the wingtips where the lights go.



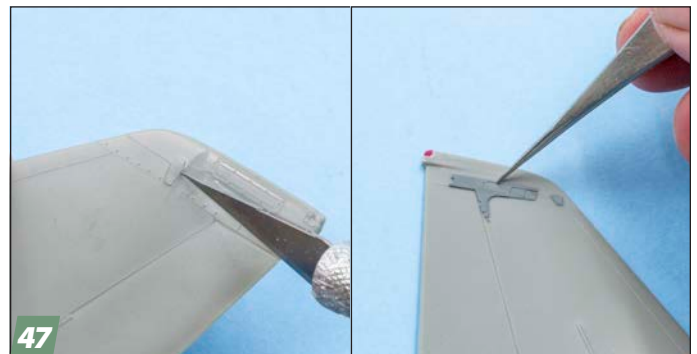
44 Then I glued in chunks of appropriately colored plastic cut from toothbrush handles ...



45 ... and used a rotary tool to shape them.



46 I repeated this method to improve the anti-collision lights on the vertical tails.



47 Also on the tails, the reinforcement braces need to be updated from the initial hexagonal pieces to the style fitted in the early '80s. I shaved the details off and applied Steel Beach self-adhesive braces.



The last improvement I made was to drill a hole where the main landing gear latch is located. This provides wiggle room to get the main gear positioned just right. With that, construction was complete, and it was time to send the Tomcat to the paint barn. **FSM**



