

"TOP GUN" + 20

Better ways to build
Monogram's classic
F-14 Tomcat

By Darren Roberts



A model contest I attended recently had a category for "Modeling the Movies." Being an F-14 Tomcat fan, I immediately decided to build a jet from the 1986 movie "Top Gun." It would be a fitting tribute, since 2006 not only marks the 20th anniversary of the movie but also the end of active service for the Tomcat. By late 2006, the last F-14 squadron will and be replaced by F/A-18E and F Super Hornets.

There are several 1/48 scale F-14 Tomcat models on the market, but since I was waxing nostalgic I thought it would be fitting to pull out the old Monogram kit. It was first released in 1981, which makes the kit 25 years old. It's hard to imagine that much time has passed!

When it first came out, the Monogram F-14 was a quantum leap forward in detailing. The cockpit featured raised instrument detail, and the seats were four separate pieces. While raised panel lines are sacrilege by today's standards, these were accurate and not overdone. The parts' fit wasn't great, but after building almost 30 of these models over the years I've come up with some short-

cuts that make building this kit quite manageable. With some extra effort, the finished product rivals any kit on the market today.

Straight out of the box, the Monogram kit wasn't quite what I needed for this project. The Tomcats used in the movie had a sensor on the tip of the nose known as an "alpha probe;" later releases contain this part. They also had the newly installed Television Camera System (TCS) under the nose. However, the Monogram kit fit the bill in every other way.

First things first

To make construction easier, I implemented shortcuts. First, I cut away the stabilators from the top half of the fuselage and set them aside to attach later, **1**. I also wanted to be able to attach the wings later, but the gear mechanism wouldn't allow for that. So, I removed the gears, **2**, and cut a notch in the pivot holes on the underside of the wings, **3**. This allows for the wings to be attached after the fuselage halves are assembled and seams filled. The wings are also a bit thick, and the halves don't match up well.



To commemorate the retirement of the Tomcat and the 20th anniversary of the movie "Top Gun," Darren modeled "Maverick's" jet from the Monogram kit. FSM photo.



1 The first thing Darren does is separate the horizontal stabilizers from the upper fuselage half.



2 Next up is removing the working swing-wing gear to make it possible to add the wings after assembling the fuselage.

A simple remedy is to level the mating surfaces with a sanding stick, **4**. This thins the wings and improves the fit.

The office

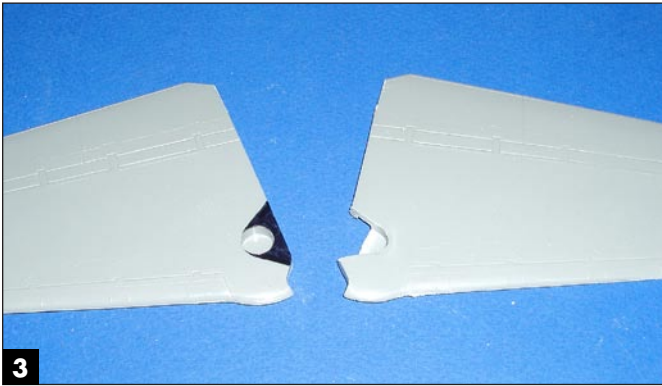
Before the fuselage could be assembled, the cockpit needed to be completed and installed. The cockpit detail is good, **5**, despite its vintage. With careful painting and dry-brushing, it looks great. I painted the entire tub and instrument panels dark gull gray (FS 36231) and the individual bezels and consoles a very dark gray. After dry-brushing with gunship gray (FS 36118), I picked out the knobs and switches with white. I dry-brushed with gunship

gray one more time and gave the entire tub a wash of thinned Tamiya smoke (No. X-19). This leaves a gloss finish, so I sprayed clear flat over the entire tub.

Installation of the cockpit leaves tricky-to-fill gaps. I turned the fuselage upside down and set the cockpit inside, then applied a bead of gap-filling super glue along the back edge of the tub to secure the assembly, **6**.

Chop, drill, and slice

Monogram molded a little bit of the fuselage sides with the intake trunks. If the intakes are installed as is, the seam is difficult



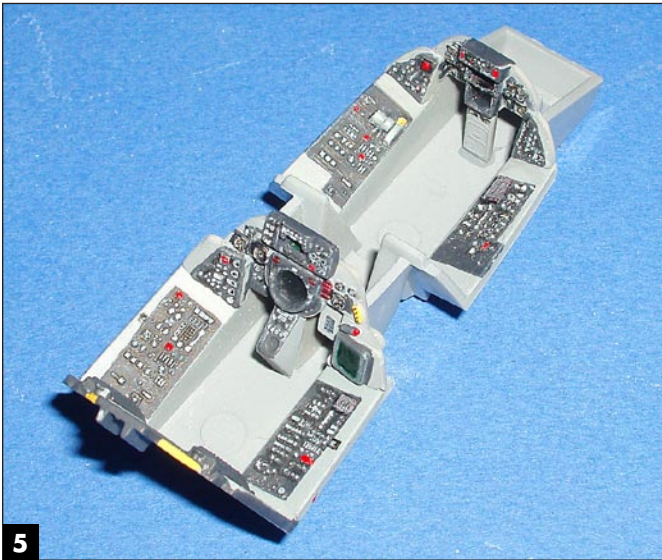
3

The pivot points on the swing wings also have to be removed.



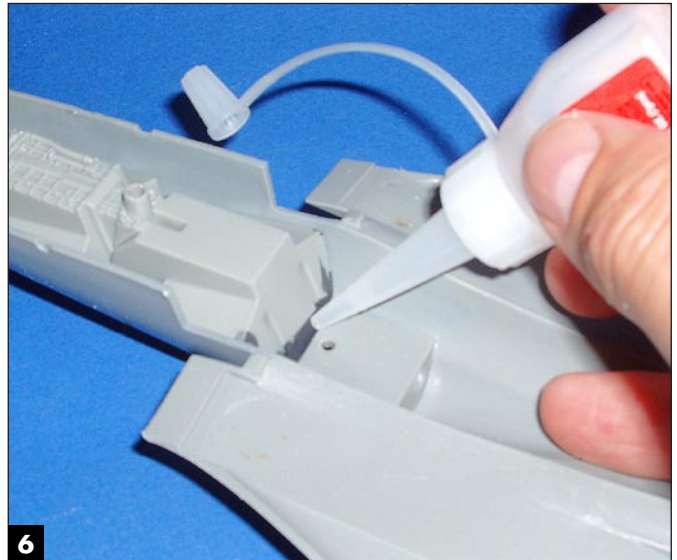
4

To improve the fit of the wing halves, Darren sanded the inside surfaces.



5

All Darren needed to do was paint the raised and recessed details of the Tomcat's "office."



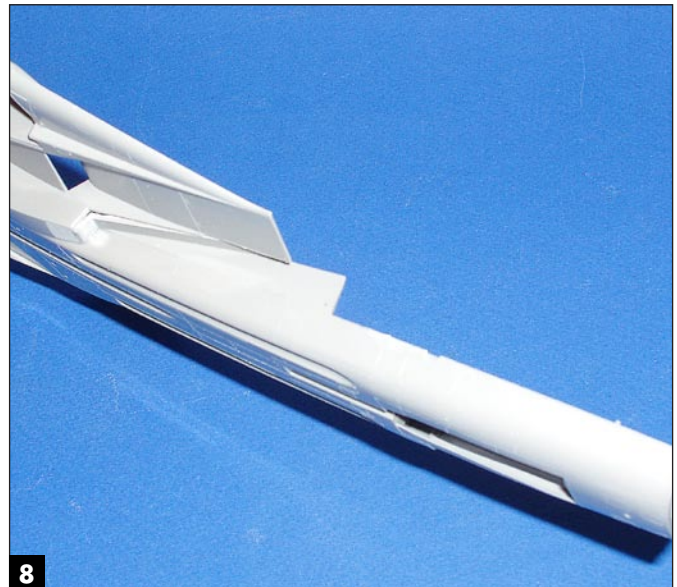
6

Gaps around the back edge of the cockpit tub were eliminated with gap-filling super glue.



7

Removing the small section from the intake trunks makes it easier to fill fuselage seams.



8

Joining the small section to the fuselage without the intake trunk in the way is an obvious improvement.



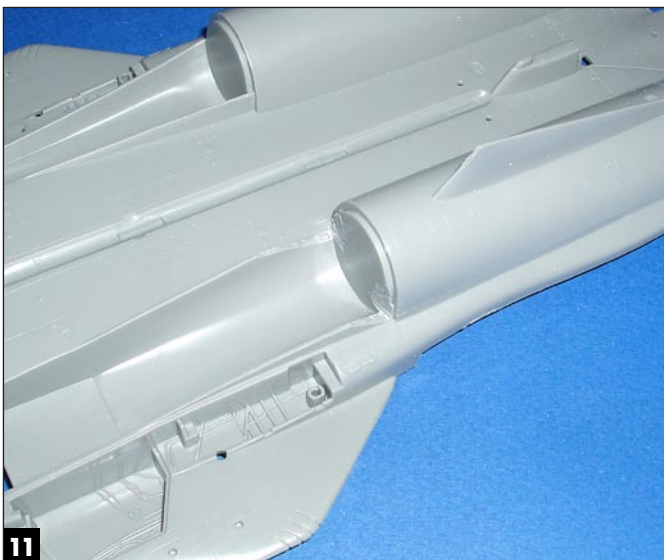
9

Darren sharpened the blunt nose cone with various grades of sanding sticks.



10

To make the intake trunks fit better, Darren refined the shape of the mating surfaces.



11

Sharper corners allow the intake trunks to fit more tightly.



12

Thinning the aft edges of the trunks also helps.

to fill. I cut away the fuselage sections from the intake trunks with a razor saw, **7**, and glued them onto the fuselage, **8**. I left the intake tunnels for later.

I wanted to attach the radome before puttingtying so everything could be blended together. Since the early Monogram kit didn't come with a nose alpha probe, I used a pin instead. My kit's radome had a deformed tip, but five minutes with a coarse-grade sanding stick smoothed it to the correct shape, **9**. I drilled a hole in the tip of the radome and super glued the pin from the inside. I cut the pin off at the correct length and sanded its tip to remove any rough edges. With the alpha probe in place, I attached the radome, puttied the seams, let it dry, and sanded everything smooth. I lost the raised detail when sanding the seams, but I would take care of that later.

Monogram's intake tunnels present several seams that are awkward to fill. I decided to forgo some of this work by installing my own line of Steel Beach Accessories vinyl F-14 FOD covers on the front of the intakes. With the covers on, nobody can see the seams inside the intakes. But there are still seams on the outside to fill: With a hobby knife, I shaved away the placement wedges on the fuselage, **10** and **11**. I also thinned down the inside of the intakes where they attach to the fuselage to make them fit better, **12**. I glued the intakes into place, puttied, and sanded the seam smooth.

Get those legs in shape

The landing gear is nicely detailed, but it doesn't quite attach to the model at the correct angle. If you're not careful, the finished main landing gear has a strange, canted appearance. To help avoid this, I drilled a hole in the small connecting point on the intake tunnel, **13**. Then I sanded down the inside of the gear leg, **14**. This provides some room for the gear to be glued into the well. I also sanded the end of the retraction strut where it glues to the well, as it's a bit too long, **15**. This helped me place the gear legs correctly.

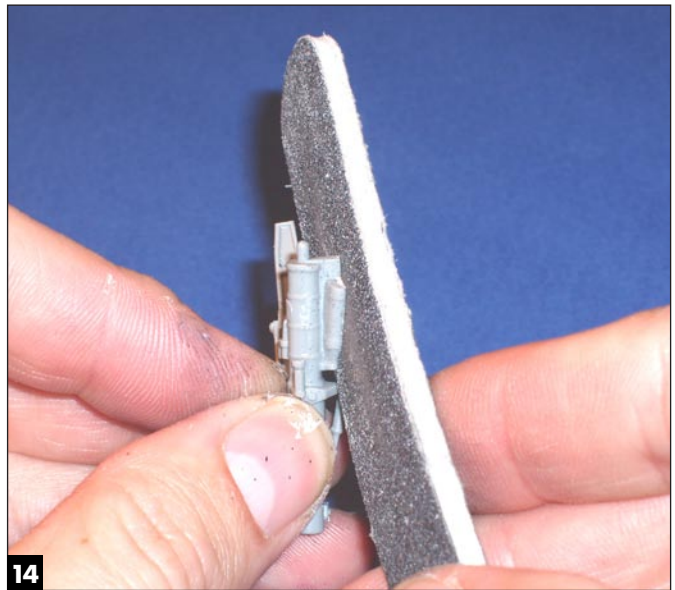
Break out the paint gun

With construction complete, it was time for my favorite part of modeling – painting! After watching the “Top Gun” movie a few dozen times, I could see the paint job on the Tomcats featured in the film was less than pristine. Maverick's Tomcat had a patchwork of touch-up colors as well as an entire replacement panel in a completely different color.

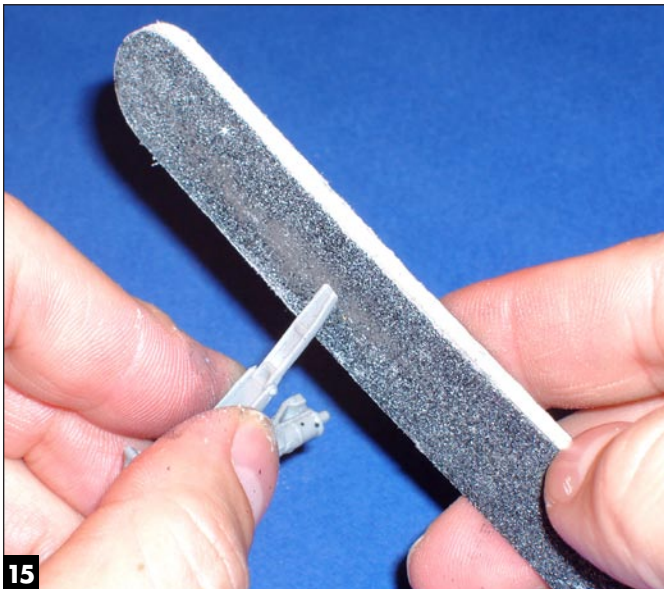
I began by spraying the base colors for the Tactical Paint Scheme (TPS), **16**. I used Model Master Acryl paint; it covers well, it's easy to hand-paint small areas and, best of all, it has little odor. I sprayed the top side blue gray (FS 35237), the sides of the fuselage and tails dark ghost gray (FS 36320), and the undersides light ghost gray (FS 36375).



13 Holes drilled in the intake trunks help align the main gear struts.



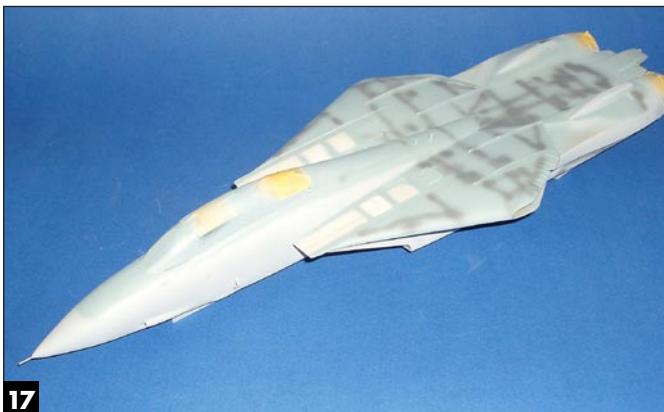
14 Sanding the inboard side of the main strut helps prevent splayed gear.



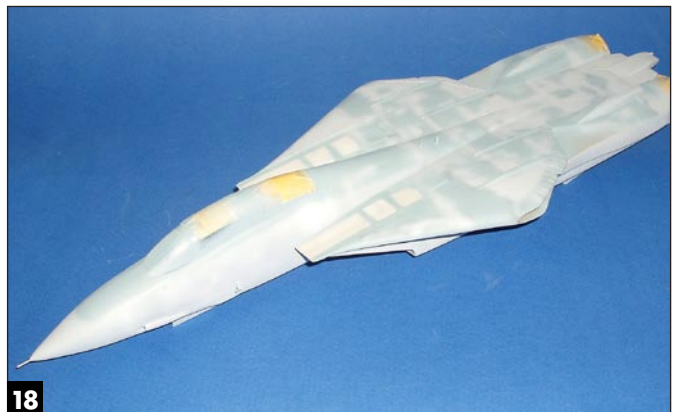
15 Shortening the end of the retraction strut also helps the installation.



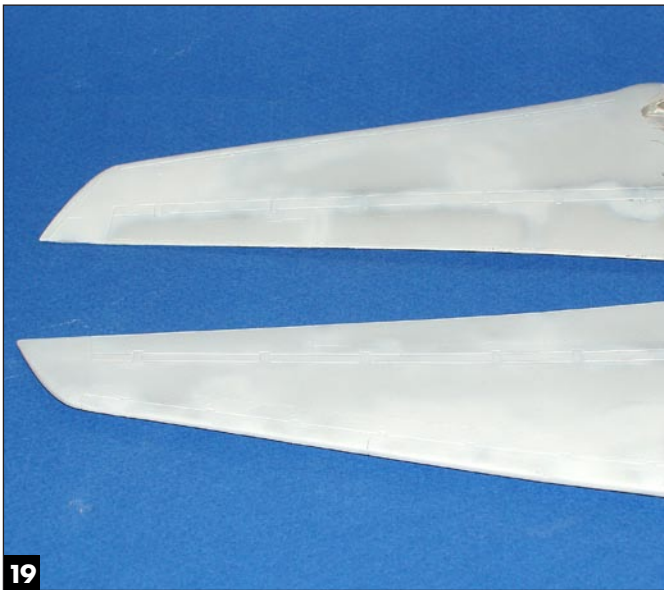
16 Here's the fuselage put together and masked prior to applying the standard TPS camouflage paint pattern.



17 To simulate frequent retouching to the real aircraft, Darren outlined panels with gunship gray.

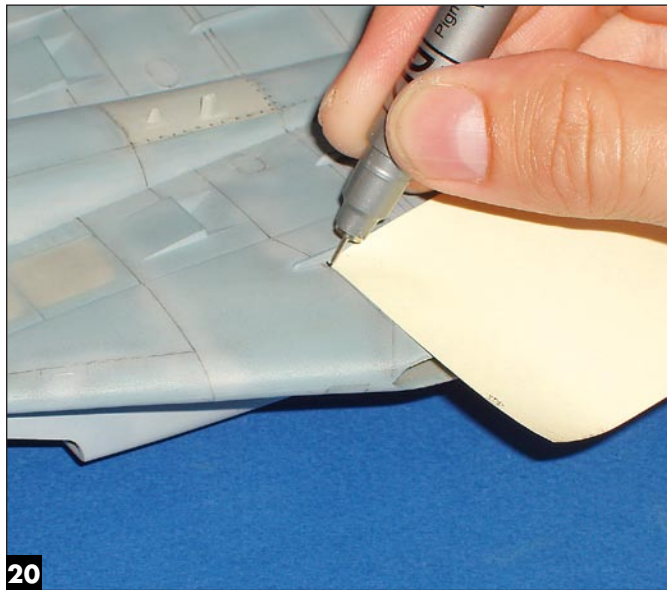


18 Over the gunship gray are thin lines of light ghost gray.



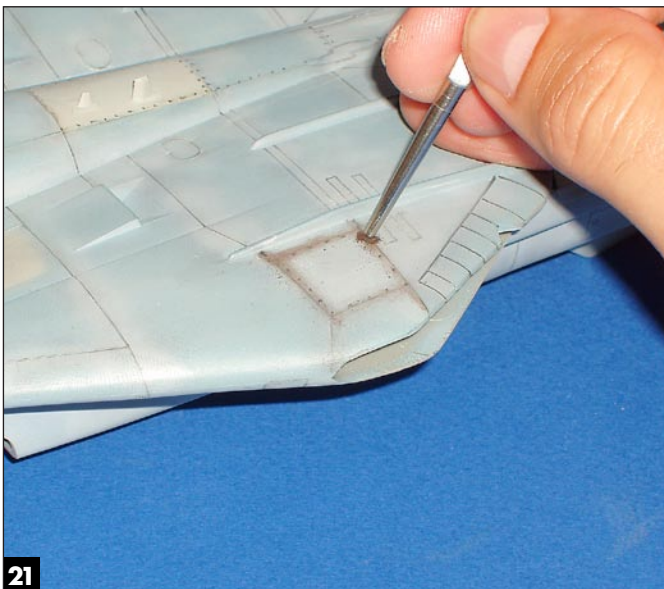
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The "retouching" looks prototypical on the wings.



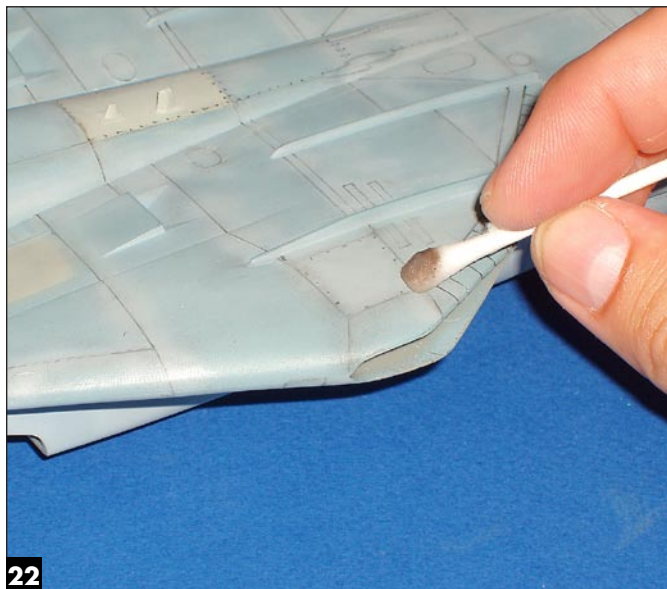
20

To accent panel lines, Darren used a fine draftsman's pen guided by low-tack, easy-to-remove Post-it Notes.



21

The pen is followed by a scrubbing with burnt-umber pastel chalk dust.



22

Excess ink and chalk dust is removed with a dampened cotton swab.

With the base colors dry, it was time to make Mav's "Top Gun" Tomcat look not-so "top."

During the last few decades, Navy jets have looked pretty ragged. To keep salt air from corroding exposed metal, paint on Navy jets is constantly retouched. The color of paint used really doesn't matter as long as it's gray. When these touch-ups are done, the fresh paint is considerably lighter than the surrounding area, which has collected dirt and grime. To replicate this, I sprayed the panel lines and various other areas with gunship gray (FS 36118), **17**. Switching to a fine-tipped nozzle on my airbrush, I went back over these areas with light ghost gray, **18**. The trick is to leave a hint of the gunship gray at the edges of the lighter color, **19**. I blended everything with a light misting of dark ghost gray over all the upper surfaces.

I find rescribing both tedious and daunting. So, I didn't sand off the kit's raised panel lines, instead accenting them with a draftsman's .005" ink pen. Using a Post-it Note as a straightedge,

I ran the pen along each panel line, **20**. Next, I scoured burnt-umber pastel chalk dust along select panel lines with a stub brush, **21**. I wiped off the excess ink and chalk with a damp cotton swab, **22**.

But, what could I do about the areas where sanding obliterated the panel lines (pretty much the entire forward fuselage section)? Again, the ink pen came to my rescue. Using thin strips of low-tack masking tape, I marked each panel line and simply drew it on, **23**. Again, the pastel chalk and damp cotton swab followed up. The result is convincing: panel lines with a fraction of the work required by rescribing, **24**. This method also was a lot more forgiving of mistakes, as I had a few seconds to wipe away the wet ink if necessary.

Maverick and Goose

I was able to find a set of Testors kit decals from its "Top Gun" F-14 release. Both Maverick's and Iceman's markings are on the



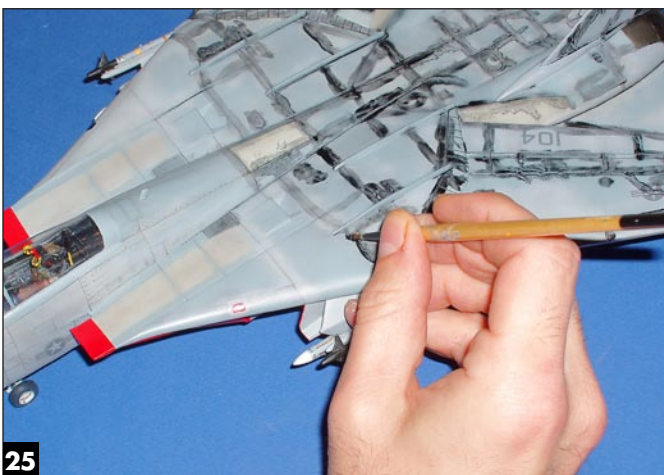
23

Most of the raised panel lines had been sanded down on the nose during seam cleanup



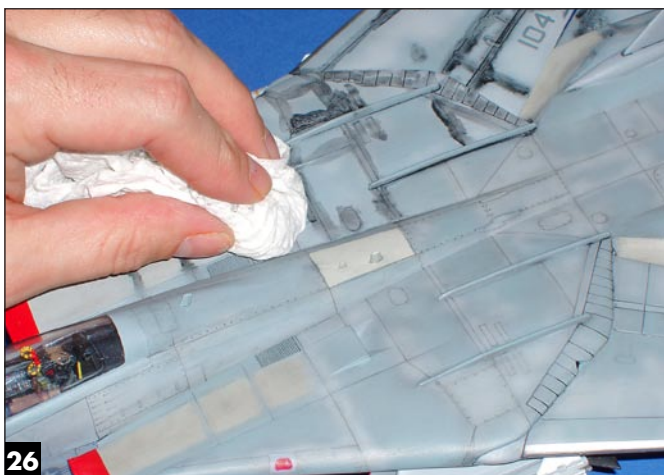
24

Darren drew new panel lines with the ink pen.



25

After the final flat overcoat, Darren added a little more grunge with an oil wash.



26

Excess oil wash was removed with a cloth dampened in Turpenoid.

sheet – but who wants to make a model of the bad guy’s jet? The decals were a little thick, but they settled down nicely with some Micro Sol. To avoid decal silvering, I brushed Future floor polish under the decals, then wiped up the excess with a damp paper towel. When all the decals were in place, I sprayed a coat of Future to seal everything, then flat-coated the entire model with Model Master Acryl clear flat.

Finishing touches

When the flat coat was dry, I added one final oil wash for “grime.” I thinned lamp-black artist’s oil paint to the consistency

of milk with Turpenoid and brushed it along all of the panel lines, both raised and engraved, **25**. (Turpenoid won’t harm the underlying paint or decals.) I let it sit for about 30 minutes while the oil paint dried, then wiped excess oil paint from the panel lines using a paper towel dampened with Turpenoid, **26**. Don’t let the oil wash sit too long, though, because once it cures, its stains are difficult to remove.

With that, my F-14 was finished. It was fun to bring back those fond childhood memories by building the old Monogram kit. It also gave me an excuse to watch “Top Gun” a few more times! **FSM**

The end of an era: Goodbye to the F-14 Tomcat

Designed to fill a Navy requirement for a fleet defense fighter to replace the aging F-4 Phantom II, the Tomcat was conceived after the failed attempt to develop a joint Navy/Air Force fighter, the F-111A and B.

Cost overruns and lack of performance had doomed the Navy F-111B from reaching operational service. Its death came at a Senate Committee meeting with Navy higher-ups. When asked if the underpowered F-111B could meet requirements with more powerful engines, Admiral Thomas Connolly, for which the Tomcat is named, answered, "Mister Chairman, all the thrust in Christendom couldn't make a fighter out of that airplane." With that, the F-14 Tomcat was born.

For the past 34 years, the F-14 has graced the decks of U.S. Navy aircraft carriers sailing around the world. The Grumman aircraft has served with 30 fleet squadrons, been involved in numerous conflicts, and proven throughout its distinguished career to be one of the most capable fighters of all time.

It began its service at the end of the Vietnam War, covering the evacuation of Saigon from the deck of the USS *Enterprise*. In the 1980s, Tomcat crews shot down four Libyan airplanes and intercepted an airliner carrying terrorists. They have flown



One of the last Tomcats in service, a VF-213 "Black Lions" F-14 taxis to the bow catapult on the USS *Theodore Roosevelt* (CVN-71). The aircraft boasts full-color markings and, coincidentally, a 213 nose number. Darren Roberts photo.

countless hours in the skies of Iraq. Most recently, F-14s have participated in action over Afghanistan, and they are ending their service dropping bombs in Operation Iraqi Freedom.

I've been fortunate over the years to have seen a number of F-14s up close. My most memorable experience was a visit to the USS *Theodore Roosevelt* (CVN-71) during work-ups for the last Tomcat cruise. I was able

to photograph flight operations of the last F-14 squadrons, VF-31 and VF-213.

By the time you read this, all the Tomcats will have been retired. New jets have come along, but the F-14 Tomcat will forever be a part of thousands of aviation enthusiasts' – and modelers' – memories.

– Darren Roberts

Operational F-14 Tomcat Fleet Squadrons

NAME	YEAR	NAME	YEAR
VF-1 Wolfpack	(1972 – 1993)	VF-103 Sluggers/Jolly Rogers	(1983 – 2005)
VF-2 Bounty Hunters	(1972 – 2003)	VF-111 Sundowners	(1978 – 1995)
VF-11 Red Rippers	(1980 – 2005)	VF-114 Aardvarks	(1975 – 1993)
VF-14 Tophatters	(1974 – 2001)	VF-124 Gunfighters	(1972 – 1994)
VF-21 Freelancers	(1984 – 1996)	VF-142 Ghostriders	(1974 – 1995)
VF-24 Fighting Renegades	(1975 – 1996)	VF-143 Pukin' Dogs	(1974 – 2005)
VF-31 Tomcatters	(1980 – 2006)	VF-154 Black Knights	(1984 – 2003)
VF-32 Swordsmen	(1973 – 2005)	VF-191 Satan's Kittens	(1986 – 1988)
VF-33 Tarsiers/Starfighters	(1981 – 1993)	VF-194 Red Lightnings	(1986 – 1988)
VF-41 Black Aces	(1976 – 2001)	VF-201 Hunters	(1986 – 1998)
VF-51 Screaming Eagles	(1978 – 1995)	VF-202 Superheats	(1987 – 1994)
VF-74 Bedevilers	(1983 – 1994)	VF-211 Checkmates	(1975 – 2004)
VF-84 Jolly Rogers	(1975 – 1995)	VF-213 Black Lions	(1976 – 2006)
VF-101 Grim Reapers	(1975 – 2005)	VF-301 Devil's Disciples	(1985 – 1994)
VF-102 Diamondbacks	(1981 – 2002)	VF-302 Stallions	(1985 – 1994)