Hasegawa's Small Scale Harrier

By Mark J. Soppet

Background

General Norman Schwartzkopf once listed the Harrier as one of the ten most important weapons systems of Operation Desert Storm. That was back in 1991. Since then, Harriers have been upgraded to the Night Attack and "B+" configurations. They have seen more combat during Operations Allied Force and Iraqi Freedom (and are still playing a significant role supporting Marine ground forces during counterinsurgency operations in Iraq.) Over the past two decades, the AV-8B Harrier II has stood for versatility and flexibility.

Ironically, the model kit scene has remained fairly stagnant in regards to producing new kits of the Harrier. Monogram had the only game in town in 1/48th scale, and Italeri and Esci duked it out in 1/72nd. Hasegawa changed all of this by launching a 1/72nd scale Harrier family (in late 2001) and a 1/48th Harrier family in late 2003.

After over ten years of having to endure the Esci and Italeri Harriers, builders of 1/72nd jets snapped up the Hasegawa offering in hopes that it would be the

definitive Harrier. What they got was a kit that was better than the rest, but could have been better.

My Harrier was a B+ model, built out of the box with minimal modifications. I started the kit in spring 2002, when it was still fairly new in hobby shops.

The combination of my laziness and frustration caused me to relegate it to the shelf, until the wave of interest in Operation Iraqi Freedom models forced me to put a major effort into the model during summer 2004. I left the model at home while I was away at school and then work; the only thing standing in the way of completion was the kit's troublesome canopy (more on that later.) I eventually finished the model in August 2006.

Building the beast

My first impression of the kit was that there were a lot of trees and a lot of parts. The plus side is that Hasegawa could make kits of all versions of the Harrier II (except for the two-seater) in 1/72nd. On the flip side, this caused some fit problems that were cause for much lost sleep.

The cockpit was straightforward. Typical of most small-scale Hasegawa cockpits, the instrument panels are flat and rely on decals. The ejection seat was passable, but could use some seatbelts. I made the belts from masking tape, with some metallic tape for the buckles. I painted the belts blue because I found a picture of blue seatbelts on Aircraft Resource Center.

Most of my headaches stemmed from the intakes. The engine face seems like it sits too far back in the intakes. The instructions told me to paint the divider between the intakes dark gull gray, which I did. Only later, after the model was

assembled, did I learn this should be white! D'oh! Further, there is a recessed panel running vertically on the fuselage inside the intakes. I have not seen this on the real airplane, and I would recommend filling it in. The demarcation line between the white of the intakes and the gray on the fuselage should be vertical, not on the slant that the instructions show. The intakes are missing the internal pitots that are so prominent in pictures. Finally, the fit of the intake pieces to the fuselage needed so much sanding that I blew away the petitely-scribed intake doors. These doors are so prominent that the scribing should be deeper than the rest of the panel lines. I attempted to draw the doors back in with a mechanical pencil after the paint and decals were applied.

I put the fuselage halves together, and it seemed that the panel lines did not match up. This did not become a problem because I sanded the panel lines to kingdom-come.

Again, the mechanical pencil came to the rescue. On the underside of the fuselage, one side is higher than the other. Again, more precious detail is lost in fixing this problem. The Lift Improvement Devices (LIDS) on the underside also had poor fit and required a deal of superglue and delicate sanding to blend into place. At least the fit of the two nose halves to the fuselage wasn't bad, and it blended nicely.

At this juncture, I identified a few areas where the Hasegawa kit actually lagged behind Esci's. The forward landing gear doors are not molded separately from the fuselage on the Hasegawa kit, even though they are sometimes seen open on the ground. The air scoops atop the wings have the proper rounded shape and open faces on the Esci kit; Hasegawa represents them with tiny, half-round bulges with solid faces. Finally, Esci gives you the dorsal speed brake that Hasegawa molded closed.

The wings went on next, covering over the gaping canyon atop the fuselage. In the interest of good fit, I recommend gluing the refueling probe on first, then filling the seam and painting it, before tackling the wings. It was hard to reach underneath the leading edge extension to fill the open seam. I believe that I used Tacky Glue applied with a paint brush and wiped away with water to fill this gap. Next came the leading edge extensions (molded as one piece, along with part of the model's spine.) A considerable amount of sanding and filling removed the step created by the attachment of this piece.

After the major subassemblies were in place, the rest of the model fell together. I painted the plane with Polly Scale acrylics. Hasegawa's FS numbers in the painting guide are incorrect. I referenced the Don Color website and Harrier pictures to get the three-tone-gray scheme correct. The patch atop the wings should be Gunship Gray (FS 36118,) while the plane is overall Dark Gull Gray (FS 36231.) Depending on whether you trust the painting instructions in Superscale's 1/48 decal sheets or the diagrams on the Don Color website, the underside is either Light Ghost Gray (FS 36375) or Dark Ghost Gray (FS 36320.) I went with Superscale's advice. I also used Polly Scale Radome Gray for the nose.

Hasegawa provides decals for VMA-542 "Flying Tigers" and VMA-231 "Ace of Spaces." I chose the more colorful "Flying Tigers." (I believe that this squadron deployed on the USS Bataan in the first phase of Operation Iraqi Freedom.) The decals were sharply-printed, and went down well for the most part. I used a combination of Super Set, Super Sol, and Solva Set (a truly magical substance) to get them to lay down. I didn't try the Gunze Decal solvents, which are supposed to work wonders on Tamiya and Hasegawa decals. There was some minor silvering on some decals after they dried, but I was happy with the overall result (aside from the canopy, as the next section will attest.)

During an ejection (a too-frequent occurrence in the Harrier,) a detonation cord embedded in the canopy breaks the glass so the pilot can punch through. Hasegawa has molded the det cord as raised lines on the underside of the canopy, in addition to the det cord decals. Additionally, Hasegawa correctly captures the bulbous cross-section of the canopy, at the expense of a seam line on the top of the part. Naturally, I lightly sanded away the seam, polished the canopy, and gave the part a dip in Future floor wax. When it came time for the decals, my det cord decals didn't match the raised pattern inside the canopy, and the decal silvered when it dried. I scraped away the decal and tried highlighting it with paint and colored pencils, to no avail. The raised lines weren't high enough to paint or highlight with pencils. I eventually highlighted the det cord by tracing around the inside edge with a sharpie marker. It's too dark when compared to the real plane, but the loss of my decals gave me no other choice. If I had to build the kit again, I'd sand away the molded det cord and use the decals instead.

The windscreen was another matter. Masking the bulbous windscreen proved to be a challenge, and I ended up repainting the part several times. Somewhere in the process, the windscreen developed a crack down the center line. I received a quick crash course in squash-forming canopies from my dad and replaced the original part. I framed the canopy using strips of gold decal. This forced me to do the same on the aft canopy. The difference in cross section between the new windscreen and original aft canopy forced me to position the canopy open, making this difference less noticeable. It's worth mentioning that there is a turtledeck piece that glues into the aft canopy, but it's designed with a significant gap between this piece and the canopy that should be filled (perhaps Testors' Canopy Glue will do the trick, but I was lazy and left the gaps as they were.)

Final assembly presented its own challenges. The prominent pitots mounted on the nose are very tiny, and there are large sprue attachment points that need to

be sanded away. I attempted to sand one after super-gluing it to the model; unfortunately, this just sent the piece into orbit. I stole a new pitot from the Italeri TAV-8B and modified it to match the Hasegawa part. Also, the aft landing gear strut looks like it's slightly twisted along its axis, while the fit of the outrigger struts into their wells is very tight.

I hung a weapons load typical of OIF on my Harrier. LIDS were carried in lieu of the gun pods, no Sidewinders were on the outboard pylons, and fuel tanks were carried on the middle pylons. It's almost a shame I didn't use the Sidewinders, because the kit parts look pretty good, whereas most kits come with crude weapons that force the builder to buy a Hasegawa weapons set instead. The starboard inboard pylon carries a targeting pod, not included in the kit. I stole the LANTIRN targeting pod from the Italeri F-16C/D (a fairly crude kit that normally should be passed over) and modified it by sanding the pod's nose to a dome shape and lengthening the air scoop with a piece of thin plastic sheet. On the port inboard pylon is a 1,000-pound GBU-16 from Hasegawa Weapons Set #6. I came up with a G-rated message and wrote it on the bomb with a fine brush.

Conclusion

While Hasegawa makes the best Harrier in 1/72 scale, the kit has some significant pitfalls in terms of fit, and there are areas where the ESCI and Italeri Harriers offer more options. Hopefully, Tamiya or Academy will eventually do a 1/72 scale Harrier to correct these problems. The Hasegawa Harrier wasn't my best effort, but it still looks okay. Most importantly, it's finished after four sometimes-frustrating years. This model is dedicated to the Marines who have served and are currently serving in Afghanistan and Iraq. They are the bravest and toughest that our nation has to offer, sacrificing themselves to preserve our way of life. Semper Fi!

References

1. AV-8B Tactical Paint Scheme. Accessed on 13 Sep 06 at http://www.jpsmodell.de/dc/draw/av8b_lv.jpg

2. Janega, J. (2005, March 19.) Harrier jet shakes off past to prove itself in Iraq. *Chicago Tribune.*

3. Roof, D. AV-8B Harrier Ejection Seat. *Aircraft Resource Center.* Accessed on 13 Sep 06 at http://www.aircraftresourcecenter.com/AWA1/001-100/walk076_AV8B_Harrier_seat/walk076.htm