Build an accurate DOOLITTLE RAIDER

Simple improvements make Accurate Miniatures' B-25B kit even better

By Philip Gore

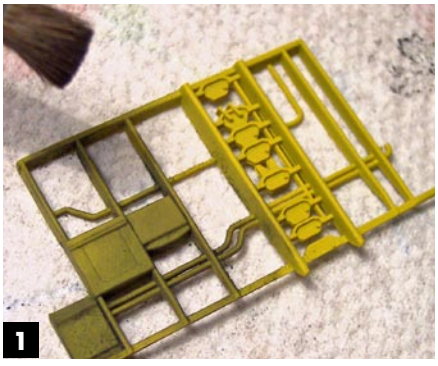
The first few months of 1942 were a dark time in America's military history. Just about all of the war news that was heard focused on defeats and withdrawals. The United States needed to be able to strike back at Japan, not in middle of an ocean, but on their mainland.

President Roosevelt was insistent that an attack on the main island take place, and charged his top military leaders with developing a plan to make it happen. This plan developed into a joint Army-Navy operation that would fly land-based medium bombers off an aircraft carrier to bomb several of Japan's major cities, including Tokyo. Led by aviation legend Jimmy Doolittle, the raid took place on April 18, 1942, and gave a tremendous boost to America's morale while having the opposite effect on the Japanese people. Although the raid did very little to damage Japan's industrial production, it did have the strategic impact (to a certain extent) of helping to set the stage for the Battle of Midway six weeks later. At this battle, the U.S. Navy was able to deal a crushing blow to the Japanese Navy and go on the offensive in the Pacific.

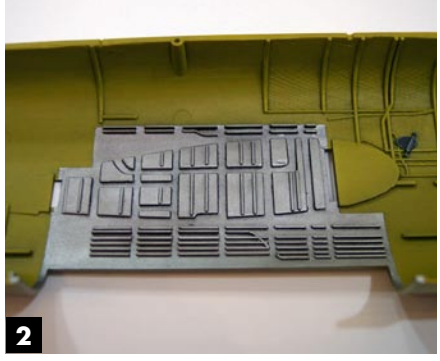
In 1999, Accurate Miniatures released its 1/48 scale kit of the North American B-25B bomber that was made famous by the "Doolittle Raid" as it came to be known. It's an excellent kit that incorporates many features of a modified "B" model used on that mission. This article details what I did to "tweak" the Accurate Miniatures kit into an even more accurate, more detailed Doolittle Raider.

Interior decorating

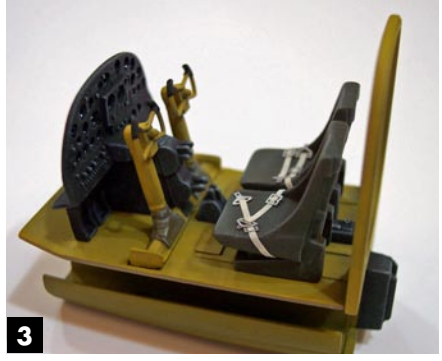
The first decision involved selecting the interior colors. In this matter I deferred to the suggestions given by Accurate Miniatures in their build of a Doolittle B-25B on their Web site. The construction photos were very helpful and are highly recommended. I painted most of the cockpit, fuselage interior, and fuselage details Testors zinc chromate yellow, but I painted the bomb-bay section aluminum. To tone down the brightness of the yellow and give a realistic appearance to the parts, I applied dark gray pastel chalk powder with a brush, **1**. Next, I brushed a clean cotton swab over the area to remove excess dust. Dry-brushing with light ghost gray was the last step in bringing out the small



1 Dark gray pastel powder helped tone down the base colors in the interior.



2 Pastels and dry-brushing worked together to add depth to the sidewalls.



3 No shoulder straps were installed on the Doolittle B-25s.



An island no more: Led by aviation pioneer Jimmy Doolittle, the B-25 bombing raid over Japan did wonders for American morale.

details. This procedure was done to every part in the fuselage, **2**. I added seat belts made from photoetched-metal parts and masking. Shoulder straps were not used on the Doolittle planes, **3**.

I finished the .50-caliber upper-turret assembly, but I wouldn't install it until later, **4**. All of the interior parts were added to the right side of the fuselage before I glued the halves together, **5**, **6**.

Fuselage Modifications

Once the fuselage halves were together and the seam lines sanded out, I had several panel lines to rescribe, **7**. There were large gaps where the bomb-bay bulkheads met the bottom of the fuselage halves. To fix this, I added several custom-cut styrene strips and sanded the connection to the bulkheads flush, **8**. The Doolittle planes had two formation lights (white on the left and red on the right) at the end of the fuselage. A small drill bit established the location, **9**, and I made the lights by mixing five-minute epoxy with a drop of paint.

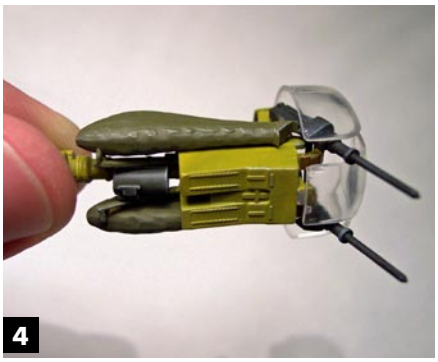
At this pointI painted and assembled the bombardier station. I didn't want to put the .30-caliber machine gun in its mounted position, but the part looked too good to not use, so I glued it to the floor section, **10**. Many of the Doolittle planes had a thin rectangular metal plate added on the top of the fuselage behind the turret. This was a "field fix" to protect the fuselage skin from damage caused by shock blasts of the .50-caliber machine guns when they were fired to the rear. I made a plate out of .010" sheet styrene, **11**.

Next, I glued the clear cockpit and canopy pieces in place. Accurate Miniatures provided vinyl paint masks for the clear parts, but I opted to use a set from EZ Mask, **12**.

Wings and things

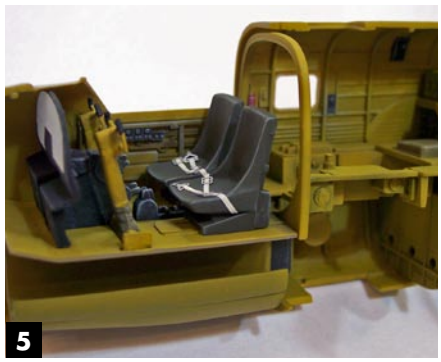
My biggest gripe with the model was the poor fit between the subassemblies. Five-minute epoxy became a life saver by hiding unsightly gaps, **13**.

I obtained a better fit between the fuselage and wing root by adding a small styrene shim, **14**. Several corrections were



4

The completed .50-caliber upper turret.



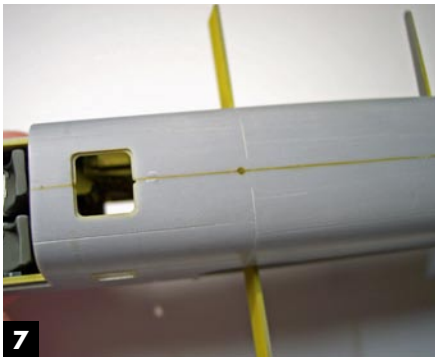
5

The finished cockpit. Note the lap belts.



6

The rear fuselage is beautifully detailed inside.



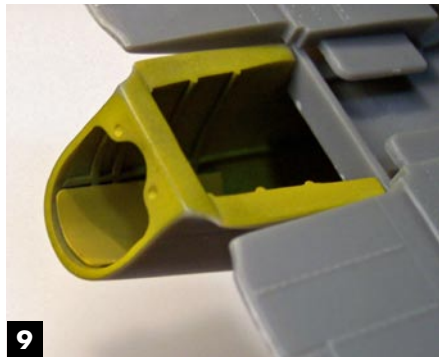
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Several panel lines needed to be rescribed. anded out.



8

Styrene strips filled gaps around the bulkheads.



9

Formation lights were added to the tail section.



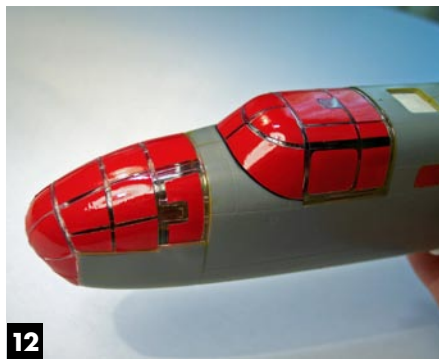
10

The completed bombardier station with its stowed .30-caliber machine gun.



11

Thin styrene sheet added behind the turret represents a protective metal plate.



12

All of the clear parts were covered with a vinyl mask set.

made to the wing tips. First, I removed the two sets of raised marker lights. I made correct "B" model lights by drilling 1/32" holes in the center of the tips approximately 3/8" from the end, **15**. I filled the three formation lights on the lower side of the right wing with super glue and sanded them away. I cut the fuel-vent stubs from the ends of both engine nacelles, too. Finally, the openings of the engine cowlings looked too small, so I used sandpaper to enlarge them from 11/16" to 3/4", **16**. I assembled and painted the engines, then glued them in place, **17**.

I painted the main subassemblies (the wings, fuselage, and tailfins) and applied their decals before final assembly. This building sequence made painting much easier, especially the deicer boots. The only caution I would pass on with this approach would be to make sure everything fits together perfectly, since major adjustments are very difficult after the model has been painted.

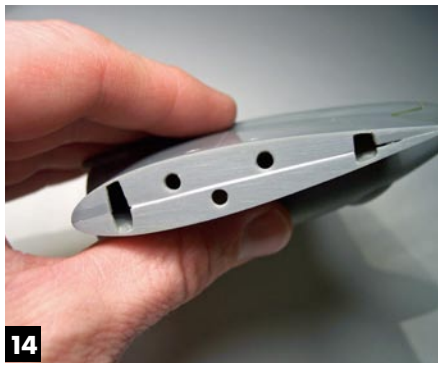
The olive-drab spectrum

The Doolittle planes carried the standard Army camouflage scheme of the day: olive drab upper surfaces and neutral gray lower surfaces separated by a blended demarcation line. I used Testor Model Master paints for these colors. Many WWII olive drab planes displayed a wide range of color variations and the Doolittle planes were no exception. The references I relied on the most were the U.S. Navy photographs taken of the planes during the sea voyage before the mission. The mission was well documented, and using photos from several different Internet Web sites I was able to spot (or verify) a few details I'd never noticed before.

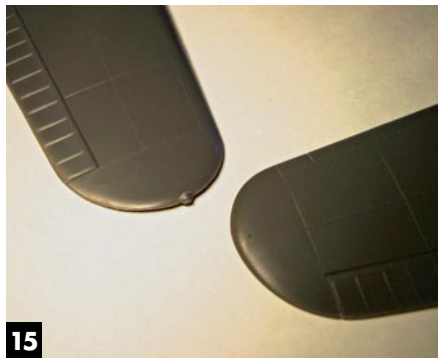
I airbrushed the neutral gray color first, then to add a little contrast, I airbrushed dark gray on various panel lines. After applying the base color of olive drab, I airbrushed a very dark olive drab wash over all the panel lines. To make this effect more subtle, I hit the panel lines again with a wash of the base color. Then I mixed a much lighter olive drab wash and



Philip eliminated many of the model's gaps with five-minute epoxy.



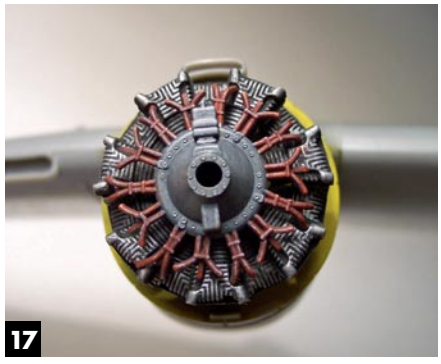
A styrene shim sandwiched between the kit parts improved the fit at the wing root.



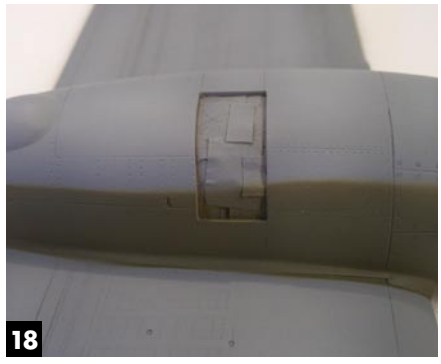
The modified wing tip (right) and the unmodified wing tip (left).



The enlarged cowling (left) and the unmodified kit cowling (right).



The completed engine assembly.



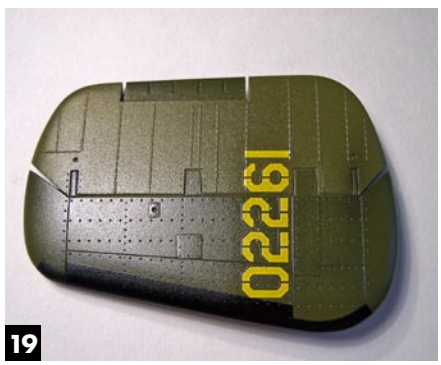
Rolling a lip on the edge of the masking tape helped produce a soft demarcation line.

airbrushed it at random on different panels, but not on the panel lines. Finally, I mixed an even lighter batch of olive drab and applied it to the the fabric surfaces of the wings, stabilizers, and tailfins, since theses areas faded faster than the metal surfaces.

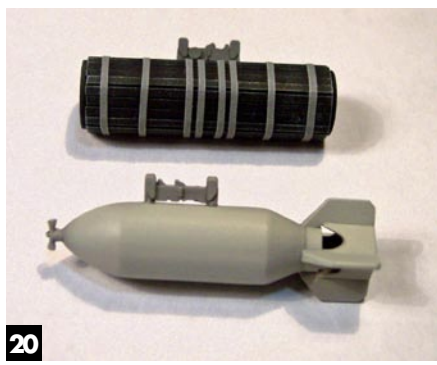
Next, I applied dark gray pastel powder around the engine nacelles, various hinge points, and a few other places. Finally, I added small touches of aluminum paint to represent chipped-off paint.

The plane I built was the "Ruptured Duck" (aircraft No. 7) piloted by Lt. Ted Lawson. This aircraft was identified in two separate photos and showed the upper surface paint job to be in good condition with minimal wear and chipping. The olive drab paint on some of the Doolittle planes had a noticeable amount of deterioration. I accomplished the "soft" demarcation line between the two main colors by rolling back the edge of the masking tape at the color separation point, then carefully holding the airbrush at a specific angle while I added the second color, **18**.

After all of the painting was done, the main subassemblies were given several heavy coats of Future floor finish and I applied the decals, **19**. All of the decals I used came from the kit, except the national insignias, which came from a



A heavy coat of Future helped the decals to conform to the model's surfaces.



The scratchbuilt M7 cluster bomb compared to a 500-pound general-purpose bomb.

Yellow Wings decal set. A 50/50 mixture of Testor Dullcote and Model Master airbrush thinner was applied to the model to give it a flat finish. To help blend them into the rest of the finish, I gave all of the decals a light overspray with a weak olive drab or neutral gray wash. When this finish was dry, I used a very soft cloth and gently buffed the entire model. This gave the aircraft a slight sheen while still maintaining a flat finish.

All together now

Finally I glued all the main subassemblies together and added the smaller detail parts. The reference photos showed smooth main tires on a couple of the Doolittle planes, so I sanded off the the kit's diamond-shaped tire treads. It also appeared the propellers had prop-data stenciling, so I added these from the Accurate Miniatures kit sheet.

The one scratchbuilt item I added to this project was an M7 cluster incendiary bomb. At least one of these was carried by most (if not all) of the Doolittle planes. I made mine out of 1"-long styrene strips I bundled together with pieces of masking tape to represent the straps, **20**. The last parts I added were two small diameter rods to represent the antennas.

I used Just Plane Stuff's cast-resin carrier deck base to mount my model. It is a beautiful accessory and is patterned after

what the flight deck of the U.S.S. *Hornet* (CV-8) looked like in April 1942. When I glued a ¼" piece of glass to the bottom of the base for rigidity, the project was complete. Yes!

Summary

This was a very demanding but satisfying project that spanned exactly six months. The Accurate Miniatures kit is certainly the best model available for anyone wanting to build a replica of this very famous plane.

It is a fitting tribute to the small group of U.S. Army airmen who volunteered for the dangerous unknown and provided inspiration to an entire country when it was needed most. Ted Lawson's book "Thirty Seconds Over Tokyo" is highly recommended for anyone wanting to learn more about one on the most famous bombing missions of WWII. **FSM**



The model looks great on a cast-resin carrier deck from Just Plane Stuff (www.justplanestuff.net).

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