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May 2021

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Hello Swamp Foxes, welcome to the May 2021 Newsletter

Here we are in May, April seems to have been a quiet month for building, but what has been built is to a very high standard as always.

First days of May saw me take a little tumble and left myself somewhat battered and bruised, I am now on the mend.

Check out Some great builds and works in progress by our members in members models, and also a long awaited article by Darby Erd.

Stay Safe, Hang in there and ..... **Keep on Building**

From the Front Office…

Howdy, all!

We're going to try for an in-person meeting this month. After contacting the library, they confirmed that they are not yet booking the meeting rooms, but when I asked if we could hold a tailgate meeting in the parking lot, they were okay with that. So, the details:

- Our normal meeting times apply--things will start at 6PM and we'll try to be done by 8PM.
- We will have the meeting in the front corner of the lot alongside Augusta Road and Library Hill Lane.
- If you have stuff to share and can bring a table, do so. If not, you can use the deck lid/hood (boot/bonnet for John) of your vehicle. (We're trying to have additional tables on site.)
- If you have a tailgating pop-up tent, you might want to bring it, too.
- Obviously, if you want a seat, you'll need to bring your own.
- If you don't have stuff to share, you might want to park in another part of the lot so we don't totally choke off that corner with our vehicles. We'll see how it plays out.
- We will be following current CDC guidelines for outdoor events. As of now, they are:
    - Maintain social distancing.
    - Masks are recommended for non-vaccinated persons.
    - Masks are optional for vaccinated persons who are two weeks removed from their last vaccine dose.
    -
- There will be a very short bit of business to discuss concerning the June show. The rest of the meeting will follow the format we have established for the show--you can hang out at your display and chat with the others who stop by to have a look. It will be very casual. If I can remember to bring a kit, and if someone could remind Tom to bring the cash box and raffle tickets, we'll have a raffle, too.
-
- I will be checking the weather, and if the 11PM weather forecast on Tuesday 18 May shows better than a 30% chance of rain on Wednesday afternoon and evening, I will pull the plug and send an e-mail on Wednesday morning to advise that the meeting will

revert to Zoom. Otherwise, there will be no Zoom meeting in May.

There will be a judges training session on 22 May at The Flight Deck. We have the room from noon onward, but the actual session won't start until 2PM, so if you want to come early and grab some lunch, feel free to do so. The training will be simulcast on Zoom, but if you can be there in person we urge you to do so. We're trying to limit the Zoom training to folks outside the Midlands, and as we all know from Zoom meetings, it is easier to moderate 10 people than it is 20. I strongly recommend that you attend if you are able.

As for the show itself, as of right now there are several restrictions in place, laid out by the SCNG Adjutant General. In a memo dated 11 March 2021, the following restrictions will apply to all non-National Guard personnel in the Armory:

-
- Properly worn face coverings will be required, regardless of vaccination status.
- Social distancing rules will be observed.
- Occupancy will be limited to 250 persons.
- So, plan to wear a mask at the show. We're doing our best to open up the floor plan a little bit for distancing purposes, and we have a plan in place to enable us to observe the occupancy numbers.
-
- I'm going to take off my club President hat for a minute...

I hope that most of you have received at least one dose of the COVID vaccine by now, or, in the case of the J&J shot, you've had that. By getting more and more people vaccinated, we should be able to get back to somewhat normal activities.

Vaccine availability is opening up more and more every day, so you should have no problem finding a place to get the shots. Many Walmart, CVS and Walgreens locations are now accepting walk-ins.

-
- Be safe. Wash your hands, make a space, and wear a mask upon your face

And get the shot. If not for yourself, do it for your family, friends, and neighbors.

-
- I hope to see all of you soon.

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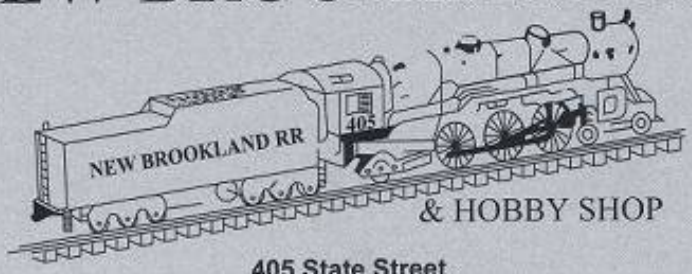

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SUPPORT THE LOCAL HOBBY STORES

Ghostrider 648

During the planning phases for the Fire Support Base RIPCORD diorama (https://www.ripcordassociation.com/ripcord-diorama/) for the South Carolina Confederate Relic Room and Military Museum, it was evident early on that we would need helicopters—RIPCORD was supplied solely by air, and many of the helicopters used to move men and materiel were the ubiquitous Bell Helicopter's UH-1 utility helicopter.

The Helicopter War's most famous player

The Bell Model 204, as the XH-40, was a response to a U.S. Army requirement for a turbine powered utility helicopter to replace the mixed fleet of piston-powered helicopters then in use. When it was accepted into service, it was designated HU-1 (Helicopter, Utility, first type), with the official name of "Iroquois", following the Army's tradition of naming their aircraft after Native American groups or people. The troops, however, playing on the designation, called it "Huey". Even though the designation changed in 1962 to UH-1, it would forever be known by that nickname.

The early Hueys would be sent to Southeast Asia, where they performed well—but combat also uncovered issues with the aircraft. Their payloads were small for the requirements of the Army's "Airmobile" concept of warfare, and the initial rotor system created some problems with blade stall, especially in a diving attack. A new rotor system, the 540 system, was introduced on the UH-1C that was more efficient, and up-rated powerplants were also fitted to aid lifting capabilities in hot and high conditions. But one thing the Army really wanted was a larger cabin.

To meet the request, Bell stretched the fuselage by 41 inches, installed an up-rated powerplant (Lycoming T53-L11), enlarged the rotor, and lengthened the tail boom. In-house, it was the Bell Model 205. The military designated these new Hueys as UH-1D, and was the first of the "long cabin" Hueys.

A later variant, the UH-1H, differed from the UH-1D in powerplant—the UH-1H was powered by the T53-L13. The long cabin aircraft could carry two gunners (one was usually the Crew Chief), two pilots, and at least 12 combat-equipped soldiers. A cargo hook could be fitted on the underside to accommodate sling-loaded outsize cargo.

Both the UH-1D and later UH-1H were capable of carrying various weapons fits, depending on the mission. Cargo carriers, called "Slicks", were most often fitted with a removable gun mount (officially, the M24 Weapons Subsystem) mounting either a .50 caliber M2 Browning or

(typical) a single M60D 7.62mm hand-held machine gun. Later, specialized remote controlled machine gun mounts and rocket launchers became common.

The history behind the model

A Company of the 158th Assault Helicopter Battalion (A/158th AHB), the "Ghostriders", was formed on 25 July 1968 from portions of the 246th and 247th Aviation Companies at Fort Carson, Colorado. Deployed to Vietnam in 1969, the 158th AHB would support all of the operations undertaken by the 101st Airborne Division until the end of hostilities in 1973, including the assault on Hamburger Hill in 1969 and the siege of Fire Support Base RIPCORD in 1970. In 1970, the unit was operating out of Camp Evans near the DMZ, and, like all helicopter units of the 101st Airborne Division, they distinguished themselves during the evacuation of RIPCORD in July 1970.

A/158th AHB was inactivated at Fort Campbell, Kentucky on 19 April 1979. It now operates as the 1st Assault Helicopter Battalion of the 158th Aviation Regiment, United States Army, flying Sikorsky UH-60 Blackhawks from the Conroe-North Houston Regional Airport.

The 158th used colored disks, or pips, on the tail boom of their ships: red for A Company, white for B Company, and blue for C Company. In addition to the red pip, the Ghostriders painted a wide white stripe laterally on the cockpit roof of their ships. To read more, see their website: http://www.ghostriders-online.org/

The model depicts UH-1H serial number 67-17648, call sign "Ghostrider 648", which was lost on a resupply mission in the Thừa Thiên Huế Province on 21 March 1970. The crew were all confirmed KIA:

CPT Gary J. "Squeaky" Barnett (Pilot)
CPT Robert S. "Volunteer" Richmond (Pilot)
SP5 Richard L. Ehnes (Crew Chief)
SP4 Ronald W. William (Gunner)

The Kit

We planned to add three Hueys to the dioramas—one "Dustoff" (medevac ship) and two "slicks". Since, by 1970, the UH-1H was the main variant in use in Vietnam, a search for kits in 1/72nd scale led us to two possibilities: Hasegawa and ESCI. Hasegawa's kit was a decade older, but was easier to find—so, Hasegawa's kit became, almost by default, our only choice.

Hasegawa's kit harkens back to 1971, and has some shape issues--the nose, from the flap

doors forward, really needs to be replaced as the nose is too bulbous and the windscreen panels are too small. Some modelers have used the forward fuselage of the Italeri short-cabin Huey kits to “fix” the Hasegawa kits, but for our purposes, the juice wouldn’t be worth the squeeze. The display warranted a “three foot” model, and that’s how the models were constructed—they needed to be presentable as viewed from three feet away.

There were some things I thought that we needed to add, so I pulled my personal kit from the stash and set about some simple modifications and instructions for the build crew. Here, let me show you how to do it…

Bringing the kit to snuff…somewhat, at least

The Hasegawa kits, as discussed, have their fair share of issues, but the big one I decided to tackle was the lack of any sort of detail in the cockpit. Granted, the diorama models would have pilots installed, but the cockpit was quite bare even with the figures. Using the “three foot” rule, I didn’t want to go to a lot of painstaking work, but I did want to make it presentable. The modifications are rather simple, and anybody with a little bit of model building skills in their toolbox can do this.

The interior lacks an overhead, which means you can see into the cockpit and right out the exhaust. A cockpit overhead was made from 0.015” Evergreen sheet to fix this. The cabin floor was used initially to create a template on index card. The card was trimmed—slowly—until it fit inside the fuselage. The template was traced onto the plastic, and the plastic cut and sanded to shape. If you’re really feeling it, you can add the overhead switch console in the cockpit with more Evergreen sheet. Since the diorama models were going to be “three-footers”, I didn’t go any further than I had to.

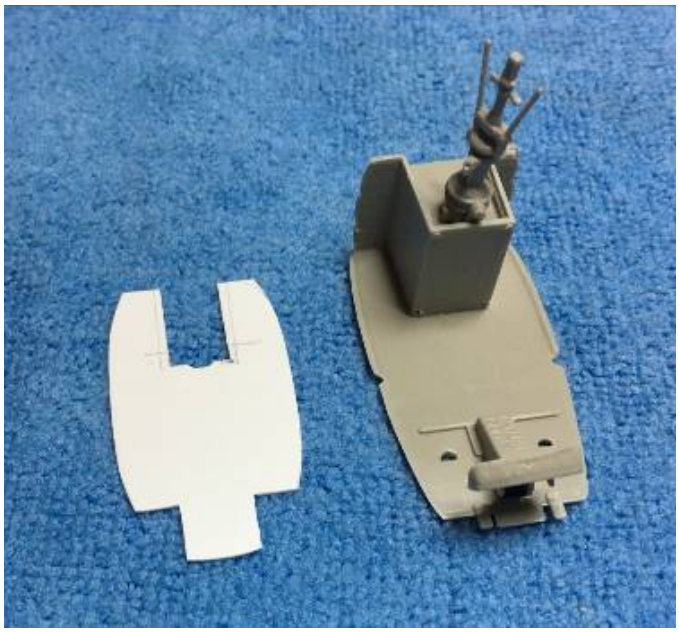


Photo 1: A simple overhead panel

The kit includes an instrument panel and seats. There are no cyclics or collectives (the “control sticks”) or anti-torque pedals in the kit. The flight controls were scratchbuilt using wire and Evergreen scraps. No special skills were needed—if you can bend wire and use CA, you

can do this.

A quick coat of FS32321 Dark Gull gray was applied in the cockpit and cabin and the center console and grips on the cyclic were brushed with flat black. Some simple tape seatbelts were added to the seats. The instrument panel decal was applied, the seats were installed into the cockpit, and once dry the interior was installed.

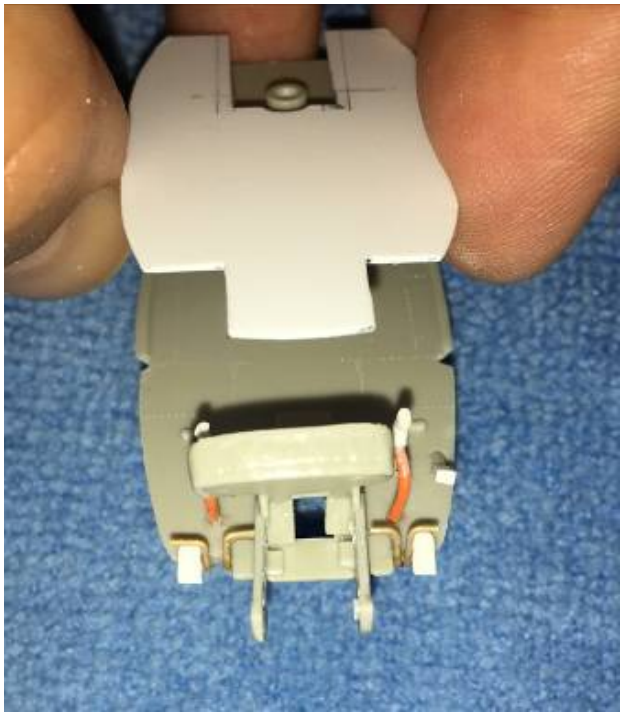


Photo 2: The overhead installed, and a look at the controls from above.

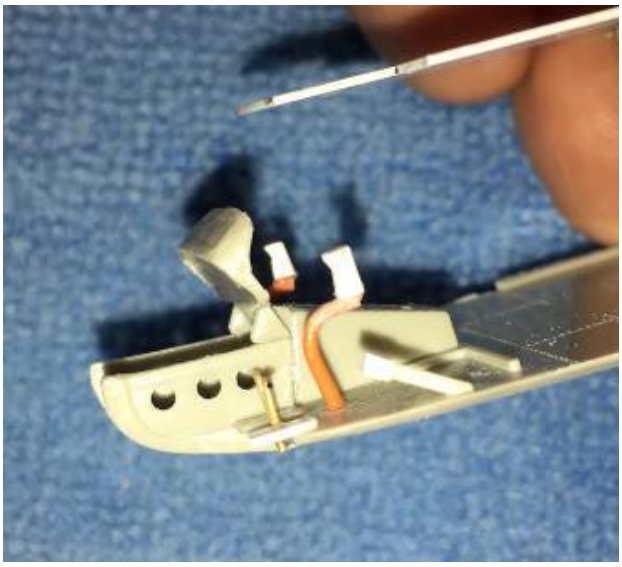


Photo 3: Controls, quick and easy.

The final addition to the interior was a slug of epoxy putty installed in the exhaust just before the fuselage haves were joined. Set back from the opening about ¼", once painted black it makes a good baffle to block light from shining through from the cabin.

The fit of the fuselage halves wasn't all that great, but the parts were continually test fit and tweaked until the fit was all that it could be. The belly cargo hook was removed temporarily to aid in dressing the underside seam. Tamiya Extra Thin cement was used to join the parts and allowed to dry overnight. The seams were then sanded, and any gaps filled with CA and again sanded smooth. Use care to retain as much of the molded-in rivet detail that you can—it might be out of scale, but these helicopters were festooned with round- and brazier-head rivets. You won't be able to save them all, but try…

The skids were modified by re-shaping the blobby forward ends with step pads. The bulk of the molded-on blob was removed and the skid tube sanded round, then Evergreen strip was used to build a more petite skid step. Once complete, the skids were installed on the fuselage—I weighted the fuselage and set the model on the skids while the cement cured to make sure everything sat level.

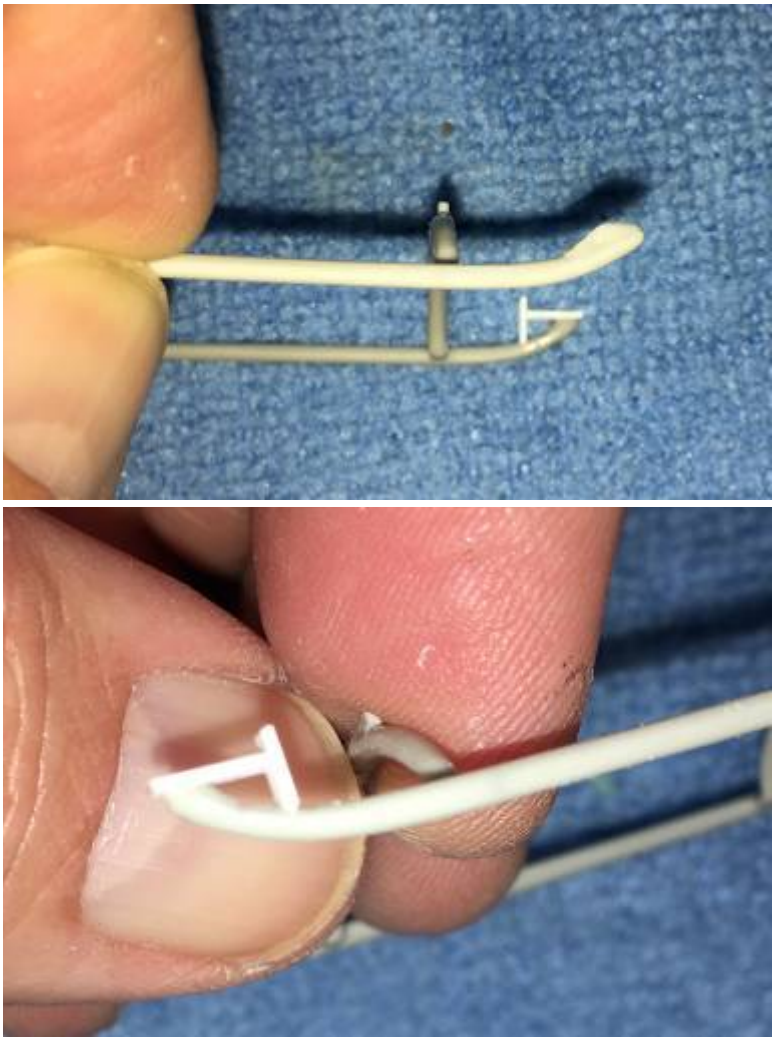


Photo 4: Skid Steps in work.

The windows were added next. Like most of the kit parts, they may have been state-of-the-art in 1971, but the fit was horrible for 2018 standards. The cockpit side windows, flap door windows, and sliding door windows were acceptable, but the windscreen panes, chin bubble, and overhead windows were not and needed some work to make them look better.

In order to get them to at least look the part, these windows were installed according to the following procedure:

1. The edges were cleaned up and colored with a black Sharpie to camouflage the thickness of the parts.
2. The overhead windows were colored with a mix of Future and Tamiya Clear Green on the inner surfaces and allowed to dry.
3. The windows were dipped in Future and allowed to cure overnight.
4. The windows were offered up to the model and, if needed, held in place with small strips of tape.
5. The windows were secured with CA. Use small tacks, working your way around the perimeter of the window until the entire seam has been glued.
6. Carefully allow the CA to fill the gaps, too.
7. Once the gaps were filled, run another bead around the perimeter of the window and allow it to cure.
8. Once dry, the CA was sanded smooth.

Yes, you read correctly. We install the parts with CA, aka Super Glue, use it to fill gaps, then sand and polish them back to clarity. Do not use an accelerator for this; let the CA cure on its own. As soon as it is dry enough to sand, start sanding the CA smooth.

(Cue Gunny Hartman: “Do you feel dizzy? Do you feel faint?”)

Hey, snap out of it! C’mon, man! You’ve come this far…you got this!

You will need 320, 400, and 600 grit wet or dry sandpaper and a set of Micro Mesh Soft Touch Finishing pads or their equivalent up through at least 6000 grit. Some Novus #2 and Novus #3 polish (at least #2) or Meguiar’s Scratch-X is needed to do the final polish.

Begin sanding with the 320 grit wet or dry sandpaper (I used a coarse fingernail sanding stick) and work your way through to the 6000 grit pad. If you want to use the 8000 and 12000 grits, that’s acceptable.

The best method I know when sanding clear parts is to sand—dry—in a straight line until all the scratches are in that direction. When you change grits, you need to first clean the old sanding dust and residual grit from the area, then sand in a direction perpendicular to the first sanding. Sand until the previous scratches are gone, clean the area, then go to the next higher grit and repeat. When you get to the 3200 or 4000 grit, use some water and wet sand in the same manner. Make sure you remember to clean the sludge off the surface before you proceed with the next grit!

Once you’ve worked your way through the sandpapers. Polish the surface with one of the polishes. If you’re using Novus polishes, start with the #2, Fine Scratch Remover. Use a microfiber cloth, apply a dab of polish, and start rubbing the polish over the window. If the polishing reveals minor scratches, switch to the Novus #3 Coarse Scratch Remover (or sand again with the Micro Mesh pads), polish the window, and then go back to the Novus #2.

If you’re using Scratch-X, use the same procedure. If you see minor scratches, sand again

with the Micro Mesh pads, and then go back to the polish.

The windows should be nice and clear. To give them a bit of protection, wipe on a coat of Future with a Q-Tip. Future self-levels, so make sure you give it a good coat and allow it to dry. They should shine. And you should be proud—I told you, you got this! Woot! Woot!

Photo 5: The chin bubble glued in place with CA...

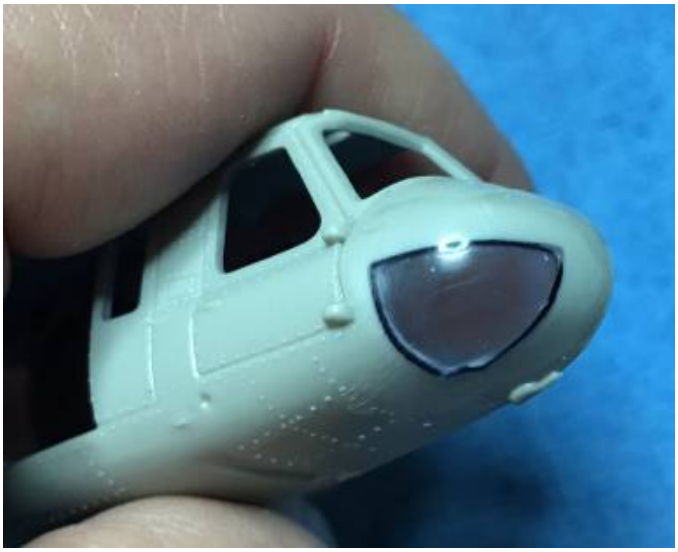


Photo 6: Sanding, in progress...

Photo 7: A touch of Future, and this will be done.

Photo 8: Tools of the trade. Novus 1 imparts a nice shine, if you don't like Future.

The rotors…well, the less said about the rotors, the better. I wouldn't fault anyone for replacing the Hasegawa rotors with ESCI parts—the Hasegawa rotor mast is simplified and the grip plates on the blades are poorly defined. Since this was a testbed for the diorama items, I stayed with the kit parts. They suffered from mold shift, which was carefully corrected by filing, sanding, and scraping. The grip panels were scribed to better define them. Once satisfied with how they looked, they were set aside for painting.

The tail rotor gearbox (if you can call the kit part that) can be installed either direction. Make sure you have it so that the shaft end (the small end) is on the left (port) side. You may feel the need, again, to either detail or replace it, so follow your dreams…

The tail skid is fragile, so be careful not to break it off. It also suffers from mold shift, so you might need to scratchbuild a new one from Evergreen rod and tube. The cabin air scoops, towel bar antenna, and pitot tube were added and the glue marks later buffed out with a Scotchbrite pad.

The cabin doors, stabilizers, and blade antenna were left off the model until everything was painted. A quick look around to make sure everything was in order, and off to the paint shop we go…

The windows were masked with strips of Tamiya tape. The openings around the cabin door were masked, and the model was primed with Vallejo Panzer Gray Surface Primer, thinned 4 drops thinner to 10 drops primer and shot through a Badger 105 Patriot with the "Fine" needle at 12 psi. Lay down the primer in a wet coat and let it dry—I left the model overnight.

Once the primer was dry, the colors were laid down. All but the tops of the stabilizers and antennas were painted with Vallejo Army Olive Drab surface primer, modulating the color so some of the dark shows through in corners and around surface details. The tops of the stabilizers and the antennas were then given a coat of Vallejo White Surface Primer and allowed to dry. After the primer dried, the tops of the stabilizers got a lick of Vallejo Orange. Finally, the "Ghostriders"' trademark white stripe on the roof was masked and painted.

Any paint glitches were carefully touched up, and once satisfied that all was well, I applied a couple of coats of Future and allowed it to cure overnight.

The rotors were primed and painted as outlined, then the blades were masked and the grips and mast were painted with Vallejo Metal Color Dark Aluminum. The blade tips were later masked and painted yellow. They got a shot of Future, too, and were set aside to dry.

The decal art work for this helicopter, like all of the decals for the diorama, was created by Jodie Peeler and custom printed by Michael Portaro of IndyCals. They went on to the model with no problems. The red pips were a layer of a white decal under the red one. A little Solvaset helped them settle down around the rivets on the surface of the model. Once dry, the residual adhesive and other "goop" was removed using a microfiber cloth dampened with distilled water.

Photo 9: RIPCORD Decals. Look at all those Combat Meal, Individual decals on the lower right...

I used an oil wash to pick out the engine grilles and to weather the helicopters. Regardless of how much I did, the RIPCORD veterans all say the same thing—"They're too clean!"

It's All Downhill from Here

A coat of Vallejo Semi-Matt Varnish was applied to the model. The windows were unmasked and any paint glitches fixed. I built up the anti-collision beacon on the exhaust doghouse with Pacer Formula 560 Canopy Glue and later tinted it with Tamiya Clear Red.

To further weather the model, a mix of Vallejo Matt Varnish with a drop or two of Panzer Gray Surface Primer added was thinned rather heavily and this mixture was misted over the tailboom to represent the typical heavy exhaust staining of the Huey. Operational Hueys got filthy on the top and right sides of the tailboom, on top of the right stabilizer, and on both sides of the tail fin, so don't be bashful. Depending on the aircraft being built, the nose may have a black anti-glare panel present, so add it if your references show it.

Photo 10: Dirty, but not dirty enough. I would later add more soot with pastels...

Artists' pigments were used to further dirty up the areas covered with soot by the exhaust. An old friend of mine (and a great modeler in his own right!), the late Peter Harlem, was a Cobra crew chief in Vietnam. He told me how, during frequent missions, the crew would have to rapidly refuel and re-arm the aircraft ("quick turn"), and he would have just enough time to wipe down the tail with a JP-4 soaked rag so he could see the serial number.

Photo 11: The famous white stripe. You can see the color modulation and oil wash weathering. You can also see how grossly small and flat the windscreen panes are on the kit…

I had been pondering scratchbuilding the M24 Weapons subsystems for the slicks on the diorama for a while, but Mike Roof was playing with TinkerCAD and designed them for his Anycubic Photon printer. He printed out several sets, which was a real time saver. I had obtained some 3D printed M60D's from Paweł Mroczkowski's NAM_Model store at Shapeways, cleaned everything up, painted the lot, and added it to the model. The feed chutes are Evergreen strip painted aluminum, the mounts were painted Vallejo Russian Green Surface Primer, and the guns painted flat black and polished lightly with an SNJ polishing cloth. If you don't have the latter, a flannel cloth and artists aluminum power do the same thing—dab a little powder on the cloth and rub it on a piece of paper until a dull smudge remains on the cloth. Gently polish the flat black paint, and it will look like a Parkerized weapon.

The gunner's and crew chief's seats were made from Evergreen stick stock and CA-soaked paper. They're not quite accurate, but they look the part, and that's what mattered to us for the diorama display.

I reinstalled the cargo hook on the belly with diluted Canopy Glue. The final addition to the model was the white blade antenna on the cockpit roof. The exhaust was given a coat of Vallejo Metal Color Jet Ejector, the end of the pitot tube painted Aluminum, and the model was done.

Photo 12: The M24 weapons subsystem, M60D machine gun, and gunner's seat

Since this model was going into my collection, I whipped up a quick base from a craft-store plaque that was sanded smooth and stained—I use an old bottle of Future that I have tinted with liquid food coloring as a cheap stain. The landscaping was simply Durham's Rock Hard Water Putty that was mixed with water to the consistency of cookie dough and spread on top of the base. The base was painted in a general "Vietnam earth" shade made up of Tamiya Desert Yellow and highlighted with a mix of red, yellow, and flat earth. Once the paint dried, it was misted with water and a layer of dry Durham's was sprinkled over the wet surface. Once dry, it was locked in with an application of Woodlands Scenics Scenic Cement, and then airbrushed with a thin mix of the earth color to tie it into the underlying colors. The ramp area represented a field pad created by spreading a product called Peneprime over compacted earth. Several applications would yield an almost asphalt-like surface that was resistant to rotor blast and wind erosion. It was first painted black and then misted with various grays to impart a realistic look to it.

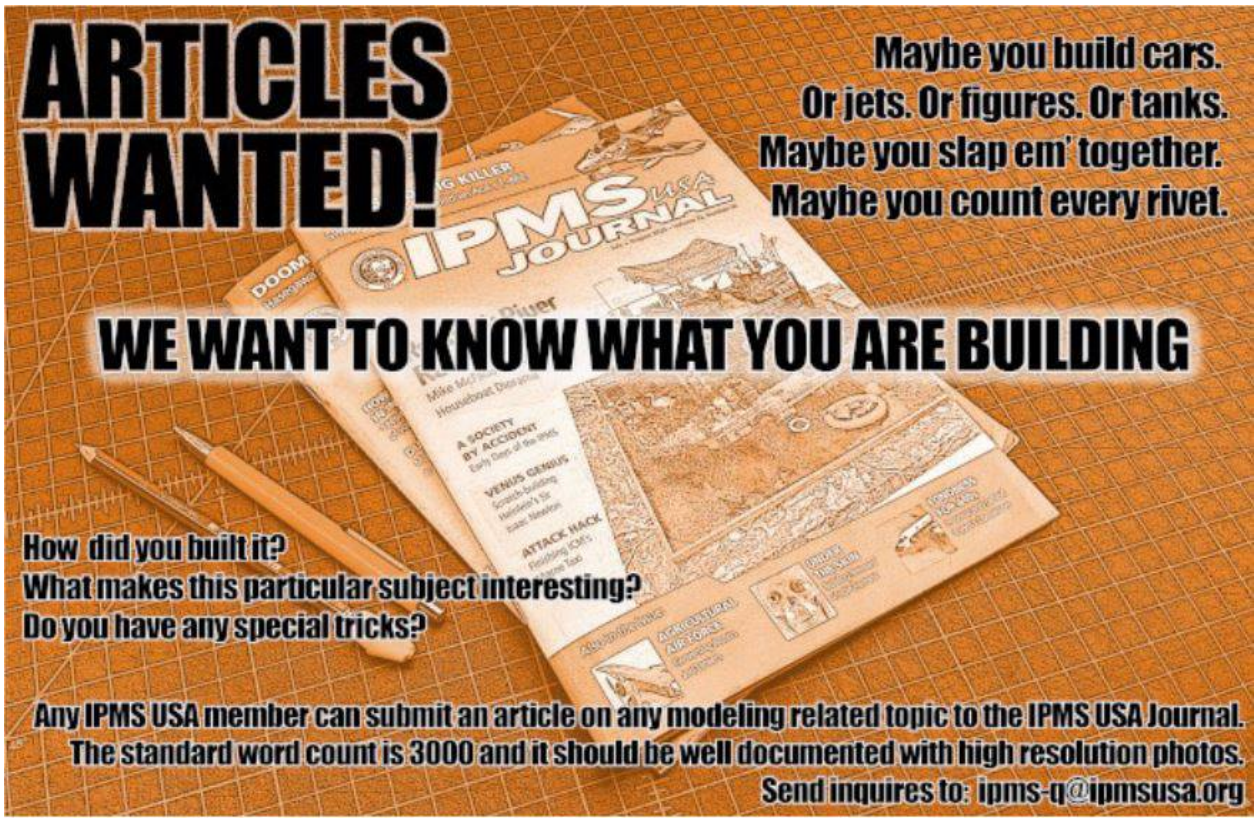
The placard was created in Microsoft PowerPoint, printed on card stock, attached to mat board, and trimmed to shape. Some white glue attached it and the model to the base.

"From An Lo to the A Sầu, Da Nang to the DMZ."

Ghostrider 648 is up on guard again.

Photo 13: Ghostrider 648 rides again.

Ralph Nardone



CARROLL SHELBY AND THE SHELBY MUSTANGS

Carroll Shelby had been a fairly successful race car driver in the 50s. He won the 1956 SCCA National Championships and was named Sports Car Driver of the Year in 1957. In 1959, Shelby and co-driver Roy Salvadori took first place at the 24 Hours of Le Mans in an Aston Martin. At one time, Shelby drove an Allard J2 with a V-8 under its hood.

But in 1960 Shelby began to experience chest pains. He was diagnosed with angina (a coronary artery disease) and was advised by this doctor to stop racing for good.

So he started the Carroll Shelby School of High Performance Driving in Riverside, CA. But he still wanted to realize his true ambition: to build his own car. He knew the formula: combine a proven chassis with a powerful and reliable American V-8.

He approached General Motors about the possibility of using Chevrolet's small-block V-8; but GM viewed Shelby's project as a direct competitor to its Corvette – which, of course, it was.

In 1962, Ford introduced its Windsor V-8, and agreed to supply some to Carroll Shelby. He then found a lightweight chassis in the AC Car Company of England. They had lost their engine supplier for their Ace sports car. AC had no engine for their chassis, and Shelby had an engine but no chassis. Ah-ha!

The resulting car, the Shelby Cobra, proved unbeatable in competition. The entire world took notice, including the powers that be at Ford Motor Company.

When Ford introduced the Mustang, in 1964, Ford promoted itself as the "Total Performance" company. While the Mustang proved popular in sales, the car was lacking in performance. And in the mid-1960s, performance equaled profit. Ford wanted to bolster the Mustang's performance image, and fast. And the quickest way to do that was to go racing.

But the track proved more difficult, due in part to the economy-car suspension and a heavy curb weight. The brakes in particular proved problematic, overheating and becoming virtually useless almost immediately.

Lee Iacocca realized that the in-house team was not getting to their performance goals. But he knew they had a winner in their program: Carroll Shelby. Using Ford's engine, Shelby had already set the racing world on its ear with his Ford-powered Cobra.

At first, Carroll Shelby had doubts about taking on the Mustang project. He was already kept busy dominating racetracks around the world with his Cobra. But Shelby had connections inside the SCCA that Ford wanted to capitalize on. Plus he owed Ford a favor – for selling him the engine that made his racing success possible. So, in late 1964, Shelby agreed to take Ford's cute little "secretary's car" racing.

They decided to use the new 2+2 Fastback Mustang for the project, using the 271-horsepower solid-lifter 289 engine as a starting point.

To qualify for SCCA B/Production racing, a company needed to produce 100 cars for selling to the general public. Shelby didn't think he could sell 100 pure racing cars, so he decided to build a street version of the car also. For the race version, they would just modify the engine to race spec.

The original building where Shelby American built their Cobra cars was an industrial building in Venice, CA. It was small facility, so his output was always going to be limited. At some point in 1965, they moved to a converted warehouse near the LAX airport.

But Shelby had a staff of dedicated car people. He asked one of his drivers – Ken Miles, an ex-pat Brit - to test drive the Mustang and see what it would take to develop a car that would stick like glue to the race track, but wouldn't be unmanageable on the street. The man was instrumental in the success of

Shelby's racing program. His immense driving talent would prove just as important to the development of the Mustang's chassis.

The new Shelby Mustang needed a name. Shelby was not enamored of the name "Cobra-Mustang" that Ford had suggested. Shelby, no doubt frustrated with corporate politics, turned to one of his engineers and asked him, what was the distance between the race shop and the production shop at Shelby American. The man's response was "about three hundred and fifty feet," to which Shelby said, "That's what we'll call it – the GT350."

Shelby ordered 100 cars from Ford's San Jose, CA plant, but to his specifications. They were white fastbacks with black interiors; no hoods were fitted, and the rear seat assembly was deleted. Radios were replaced by a plate. The engine was the stock 289 engine; and the cars were fitted with 11-inch four-piston front disc brakes, and huge 10-inch rear drum brakes from the Ford Galaxy station wagon.

Once at Shelby American, the suspension was modified. The control arms were lowered, and a quick-ratio steering box and idle arm were installed to give the car race-like reflexes. A larger 1-inch-diameter front anti-roll bar was installed, and special Koni adjustable shock absorbers installed on all four corners. Traction Master over-ride traction bars were installed, along with a Detroit Locker "No-Spin" differential. The battery was moved from the engine compartment to the trunk, to help balance the weight of the car.

Another weight-saving measure was fitting a fiberglass hood, which featured a small scoop to get fresh air into the engine. Quick-release hood pins replaced the Ford hood latch mechanism; and the stock Mustang's grille "corral" went as well. A fiberglass rear parcel shelf took the place of the Mustang's rear seat, and the spare tire was mounted on this shelf – again to center the weight balance.

Interior changes included a gauge pod molded into the center of the dashboard with a tachometer and an oil pressure gauge. This placed the gauges more directly in the driver's line of sight [ed: huh?] than if the gauges were in the dash behind the steering wheel. [sic]

Blue Dot tires were mounted on either the standard steel wheels, painted silver with no hubcaps or trim rings, only chrome acorn-style lug nuts; or on optional 15x6 Shelby five-spoke alloy wheels, which were manufactured exclusively by Cragar for the GT350.

Under the hood, Shelby replaced the intake and carburetor with an aluminum high-ride intake with a 4-barrel Holley carburetor with a special intake manifold which gave it 35 more horses. The carb also had center-pivot float bowls on top. In addition to adding power, the Holley carb solved the fuel-feed problem the stock unit experienced under heavy cornering (which could cause fuel starvation). Custom "tri-Y" exhaust headers replaced the factory cast-iron manifolds, which then fed into special free-flow

exhausts incorporating glass-pack straight-through mufflers, which exited just ahead of each rear wheel. It was actually louder *inside* the car, because there was no insulation or undercoating. A 6.5-quart aluminum oil pan was used, 30 percent larger than the 5-quart unit on the standard Mustang.

Peter Brock was tasked to design the look of the car. Brock, a former GM designer, was at that time Shelby's manager of special projects. His team decided that all GT350s would be Ford Wimbledon White. Brock then decided that Shelby's new white cars needed blue stripes. These were placed on the rocker panels and consisted of a thick blue center stripe flanked by two thin blue stripes. The center stripe was cut out on the lower front fender for the callout of "G.T. 350."

Brock also designed the most popular Mustang visual cue of all time – the bold "Le Mans" stripes – two broad blue stripes along the top of the body, that later became optional, and usually dealer installed – though the rocker panel stripes remained standard on the GT350.

Just like the original Cobra, the Shelby GT350 proved virtually unbeatable, winning the SCCA Group B Production title in 1965 and again in 1966.

Shelby sold the street version of the GT3540 for $4,547 in 1965, almost double the price of a pedestrian Mustang. The Ford factory had hoped to sell 100 cars (to meet the SCCA homologation rule). In the end, 562 GT350s in all variations were produced. In spite of the miniscule production numbers, there is arguably not a more historically significant model for either Shelby American or the Mustang. While Shelby had made a name for himself with his Cobra, his involvement in creating the GT350 gave the Mustang an identity as a world-class performance machine.

THE PONY CAR REDUX: 1966

After the unexpected success of the 1965 car, both Ford and Shelby planned big things for the car in the 1966 model year.

The original 1965 Shelby Mustang was race-inspired; with a copy-cat version for the masses. At Iacocca's insistence, Shelby had built a raw, rough-edged racing car. There was no power steering, no power brakes, and it was a handful to drive (though it had "good road feel"). The fact that the street version outsold the race model took both Shelby and Ford by surprise. Likewise, the uncompromising race car that the buyers had purchased took many customers by surprise, and they complained to their dealers. The suspension was way too stiff, the exhaust and differential too loud, the overall car too rough around the edges. Buyers wanted a back seat, more creature comforts, and color options that were less boring than Wimbledon White. They wanted automatic transmissions and power steering. Shelby realized he would have to make the car more palatable for mass consumption.

As a result, Shelby made changes to the 1966 GT350. To make its external appearance unique – and also to improve rear visibility – clear Plexiglass side quarter windows replaced the standard Mustang's fixed vent louvers. Functional brake cooling scoops were added to the rear quarter panels for each rear brake. A new-for-1966 ribbed grille was used, with the ribs polished instead of blacked out as they were on the standard Mustangs.

On the full-blown 1966 models, Shelby replaced the center-mounted tachometer with a pedestal-mounted 9,000 rpm Cobra tach atop the dash (rather than in the pod built into the dash as was the 1965). There was a "bullet" rear view mirror – but only one – it was 1966, after all.

Under the car, Shelby saved not only eardrums, but also money by simply retaining Ford's factory-installed rear-exiting dual exhausts, rather than installing the raucous side exhausts.

The battery was moved back into the engine bay, as per the standard Mustang donor cars. The spare tire was moved from the rear seat of the cabin to the trunk, to make space for the optional fold-down rear seat, a change made possible by the shift from 15-inch to 14-inch wheels. This also moved weight to the rear, compensating for the relocated battery.

And more color options were available for the 1966 car.

These changes were in large part designed to make the GT350 a more appealing street car. But by simplifying the production process and jettisoning many of the expensive parts and modifications, Shelby saved a lot of money in the process. All of this translated into cost savings which Shelby passed on to his customers – the 1,365 examples of the 1966 GT350 was actually cheaper than the 1965 model it replaced.

RENT-A-SHELBY

One of the most significant developments for Shelby in 1966 was its relationship with Hertz rental cars. For years, Hertz operated the Hertz Sports Car Club, which offered executive and business travelers - with good credit and clean driving records - the opportunity to rent a variety of high-performance cars. Shelby's GT350 seemed an obvious choice for the program. So he developed a prototype GT350 sprayed in black with gold stripes. Hertz liked what they saw, although they noted that the metallic brakes were ineffective when cold and required a very strong leg to operate. But they added the car to Hertz's fleet – provided that Shelby would accommodate a special Hertz request: placing an "H" after the "GT350" on the rocker panel logo.

Hertz placed an initial order for 200 cars, with the option of more if customer response was strong enough. It was, so Hertz ordered 800 more cars. This was nearly double the entire GT350 production of 1965.

Interesting note: they were not all Raven Black. Hertz mixed up the colors with Candy Apple Red, Ivy Green, Wimbledon White, and Sapphire Blue as well - although all had the gold rocker panel logo and the Le Mans stripes.

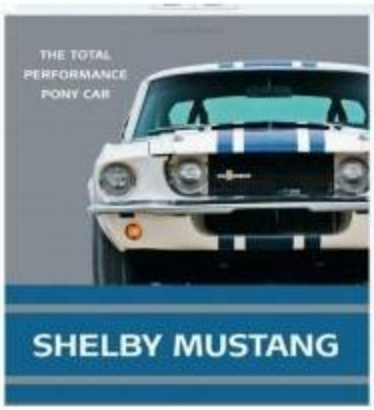
Shelby dealt with issues as Hertz reported them. The main issue continued to be the brake problem, since most drivers had difficulty adjusting (i.e. they ran into stuff). Eventually the engineers found a master brake cylinder that acted as a brake booster; and when combined with softer, non-metallic brake linings, seemed to keep most rental car drivers from damaging their cars – and their insurance.

In spite of the abuse one would expect a rental GT350 to suffer, the Hertz cars held up reasonably well. At the end of the 1966 model year, all were retired from service, and most were returned to Shelby American and Ford for reconditioning and eventual sale as used cars.

CURRENT PRICES OF SHELBY MUSTANGS

- 1965 GT350 - $100,000 to $250,000 ($4,547 when new)
  (the racing version goes for $500K to $1.3 million)
- 1966 GT350 - $20,000 to $150,000 ($4,428 when new)
- 1966 Hertz GT350H $60K to $300K ($4,675 when new)

MY SHELBY MUSTANG PROJECT – PART 1



Being a fan of Carroll Shelby and all his cars, I received the book "Shelby Mustang" by Colin Comer ($30.00 on Amazon) for this past Christmas. As I was reading it, I realized that I had a couple of Shelby Mustang kits in my stash. So I decided to do a "progressive project," building the early cars (1965 and 1966) as well as a later version or two. I decided on the 1968 Shelby, and then the 2007 Ford Shelby.

The first two are complete.

The 1965 car was Monogram's version of the Shelby Mustang GT350.

The kit was fairly good quality, although there were a couple of problems. The main one was that there was a battery in the engine bay. On the real 1965 Shelby, the battery was moved to the trunk. So I cut out the battery in the engine bay. Also, the decals were pretty bad (the kit was from 1985), so I used some blue Le Mans stripes from another kit.

The 65s all had black interiors. But I decided to build my model as if I had restored the car; so I painted it a dark blue. The real car had disc brakes on the front; but the model made no provisions for them. So I made a caliper from stock plastic and added it to the rear of the front wheels. I added a fuel pump to the stock 289 engine, and ran a fuel line from the carburetor to the fuel pump. I also added as fuel line under the chassis, from the fuel pump to the gas tank in the rear. I made racing-style seat belts from masking tape and added them to the front seats. And as part

of my personal "resto-mod'ded" car, I made an MSD ignition box from a spare part, painted it the correct red and chrome, and hung it on the right fender wall.

The 1966 Shelby Mustang model was the Monogram kit for the Shelby GT350. Again, the kit did not have the front disc brakes; so I painted yellow disc calipers on both sides of the front rotors; they can be seen through the "custom Shelby mag wheels" that were made by Cragar specifically for Shelby (which I took from the 65 kit).

Instead of the Le Mans stripes, I made a set that looked like the special stripes used on the Shelby Super Snake: one wide stripe, with two small accent stripes on the sides. There were lock-down pins on the (fiberglass) hood. And there was a bullet rear view mirror – but just one; after all, this was 1966.

For 1966, the tachometer was moved to just above the steering wheel. I made wide racing-type seat belts from masking tape for the front seats. I painted the shocks red to signify the special Koni shocks that Shelby had made for his Mustangs. And I put BMF behind the clear headlight lenses to highlight the lens pattern, giving them a 3-D effect.

Michael Martucci

Painting models by hand by Darby Erd

Most of you know that I paint my aircraft models by hand with brushes. First, let me say that hand brushing probably works best with smaller models in 1/72 scales as opposed to the larger scales, though I did paint John Helm's 1/72 He177 by hand and that was a pretty big model. With some practice you can get good results. I used to use the airbrush years ago but decided more lately that I felt more at home painting with a brush having worked as an illustrator in my career. Also, I want to say that the airbrush is a great tool. I just like the hand painting way of doing things.

You might find that you could use a couple of the hand painting techniques I will mention on your airbrushed model (like the soft line between camo colors and the splotches on German aircraft). That might help you stay in scale. Remember the over spray on a real plane would be no more than 6". On your 1/72 model, that would be less than 1/16". That would be hard to do with an airbrush.

Painting the large areas

For painting the overall model, I use a #4 sable brush by Winsor & Newton where the brush itself is about 5/8" x 3/16 in diameter. That works for me on fighters but you could use a larger brush on bombers, etc. For the edges of the large areas, you might use a smaller detail brush.

I paint the bottom first after masking off the line between the bottom and the top with thin strips of blue painters tape. After pulling the tape off, you can use the slight edge left to paint your top colors up to. Any errors can easily be fixed with touching up. I don't put tape on top of a painted area in case it might pull the paint up. The paint may need to be thinned some to go on smooth. I mostly use enamels (Model Master) and a few acrylics like white.

Brushes: The first brush is the #4 Winsor & Newton (from England) that I use for the large areas, the second is the liner brush for details and the line between camouflage colors, the last two are short scrubby brushes for dry brushing the splotches. Last on the right is the lead holder to draw in the

panel lines. You use a rotary lead pointer to sharpen.

Painting the camouflage colors on top

Paint the lighter camo color first. Start by painting a coat over the whole top area. You can paint more coats later. Looking at the camouflage pattern in the instructions or a drawing, draw the pattern on the first color with a pencil. Now paint the darker camo color defined by the pencil lines. Now you can paint more coats top and bottom until nicely covered. You may see variations in the patina as well as brush marks but these will pretty much go away with the clear coats at the end. The main thing is to get the painted areas covered.

Now for the two techniques

First if you want to soften the line between the camouflage colors, mix the two colors on the edge of the bottle and using a small liner brush, paint the 50/50 mix on the line between the two colors. This will also help cover the pencil lines. With a little practice, this should look nicely blended. See the photo of the Mosquito wing. Also, the clear sprays seem to make this look better.

Next, to paint splotches (usually on the fuselage side but maybe overall), use a stubby brush. I've been using an old worn out brush. Think of it as a small scrub brush. Get some paint on the brush and then get most of it off on a piece of paper. Using a dry brush technique, paint the splotches with fuzzy edges. I think I can get the shape of these easier using this method than I could with an airbrush. Keep at this till it looks right. It's easy to make corrections or touch up. See the photo of the Fw190 fuselage.

To finish

After the paint is dry, I use a lead holder to pencil in panel lines. I use strips of the blue painters tape on the model applied next to the panel line to guide the lead holder. Also, once the canopy is glued on, I will mask off each frame with a thin strip of tape on either side and then paint. You can't do all of them at once especially if they cross each other. Take your time and make sure the tape is down good so paint can't get underneath.

Next, you need to mask off the clear parts (canopy, lights, etc.). I use blue painters tape for this as well using various pieces for the canopy (the tape goes on over the painted framing once dry). Now you spray the entire model with clear gloss before applying decals. I just use Testors Glosscoat in the little spray can. After that dries good, you can apply your decals. After all that dries, I spray two coats of Testors Dullcote for the final finish. I don't do gloss as a final finish because the flaws and brush marks would show through. Try to avoid humidity. Obviously, you could spray the clear coats with an airbrush. After the final coats are dry, you can take off the blue painters tape and paint any gloss details like navigation lights and silver antennas, etc.

Su-2 Canopy after masking tape removed, the canopy framing was painted by masking off each frame using thin strips of the blue painters tape. You can also see the fuzzy line between the camo colors and the penciled in panel lines.

Note that brush painting might not be the best for bare metal finishes. I have not tried it though I think it might be possible. Spraying is probably best for bare metal finishes.

Darby Erd

Darby Erd – ICM – 1/72 scale SU-2 hand painted.

Members Builds and Works in Progress.


14

Hub Plott – A&A Models – 1/48 scale Me-209V4.

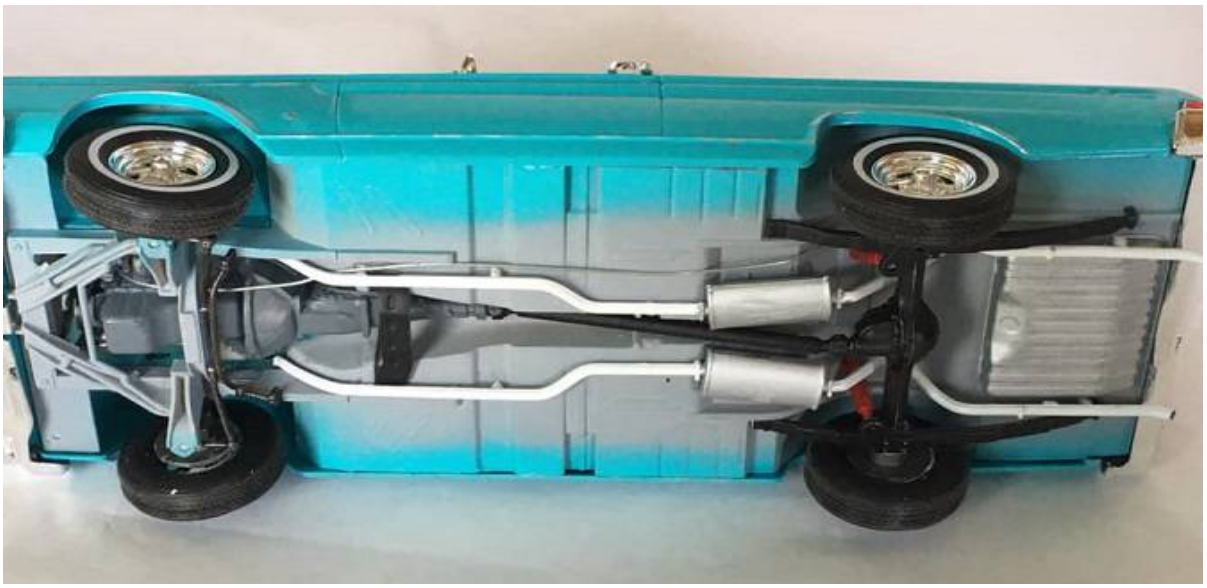
Norm Foote – AMT – 1/25 scale 1955 Chevy Cameo pickup.

Michael Carra - Trumpeter – 1/72 scale SdKfz 194 Elefant.

Michael Carra – Zveda - 1/72 Jagdpanther.

Michael Carra – Revell - 1/72 scale “Royal Tiger”.

Michael Carra – Trumpeter 1/72 scale Late Model PzKpfw VI - "Tiger I".



Michael Martucci – Moebius – 1/24 scale 1965 Mercury Comet Cyclone (convertible).

Belly of the F-4B.

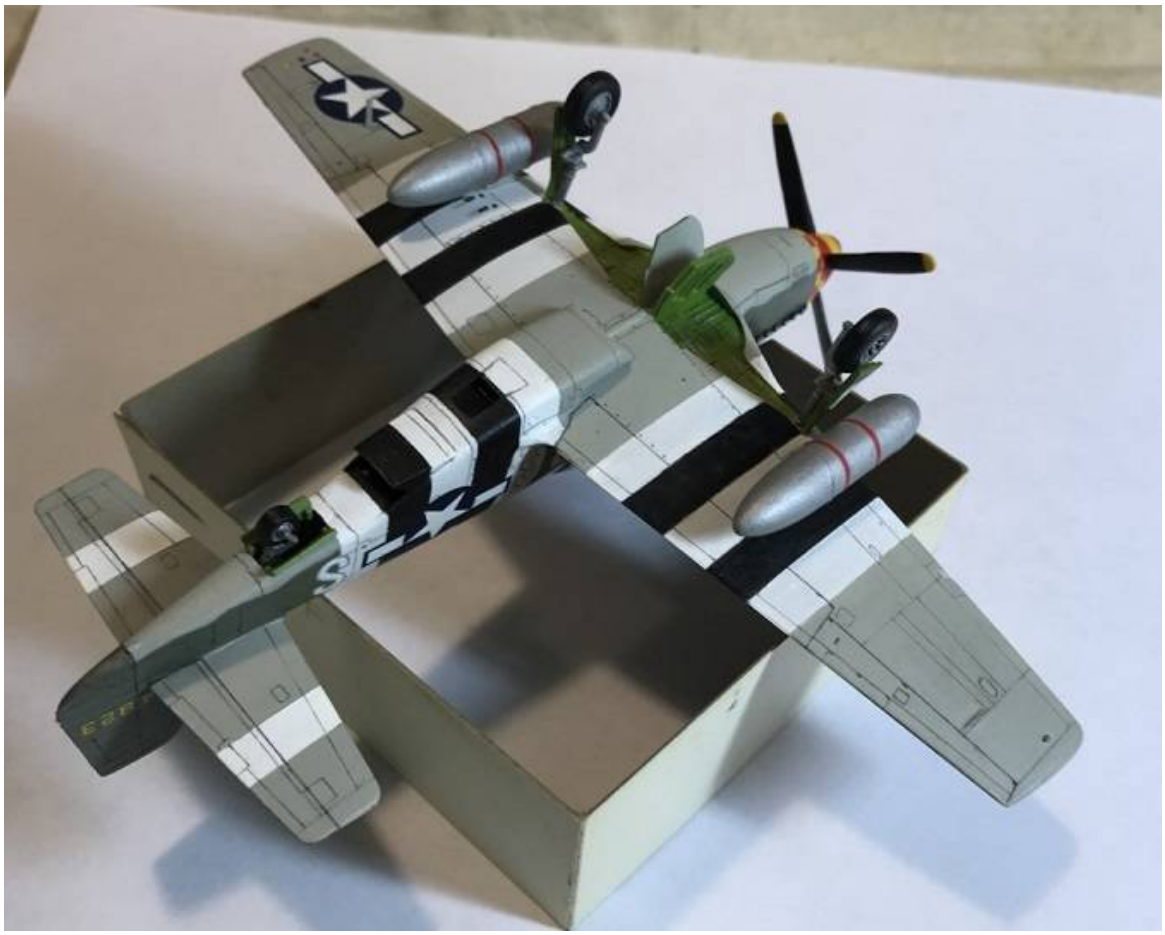
F-4B from the top.

Underside of the F-4N--the pylons are only pressed into place.

F-4N from the top.

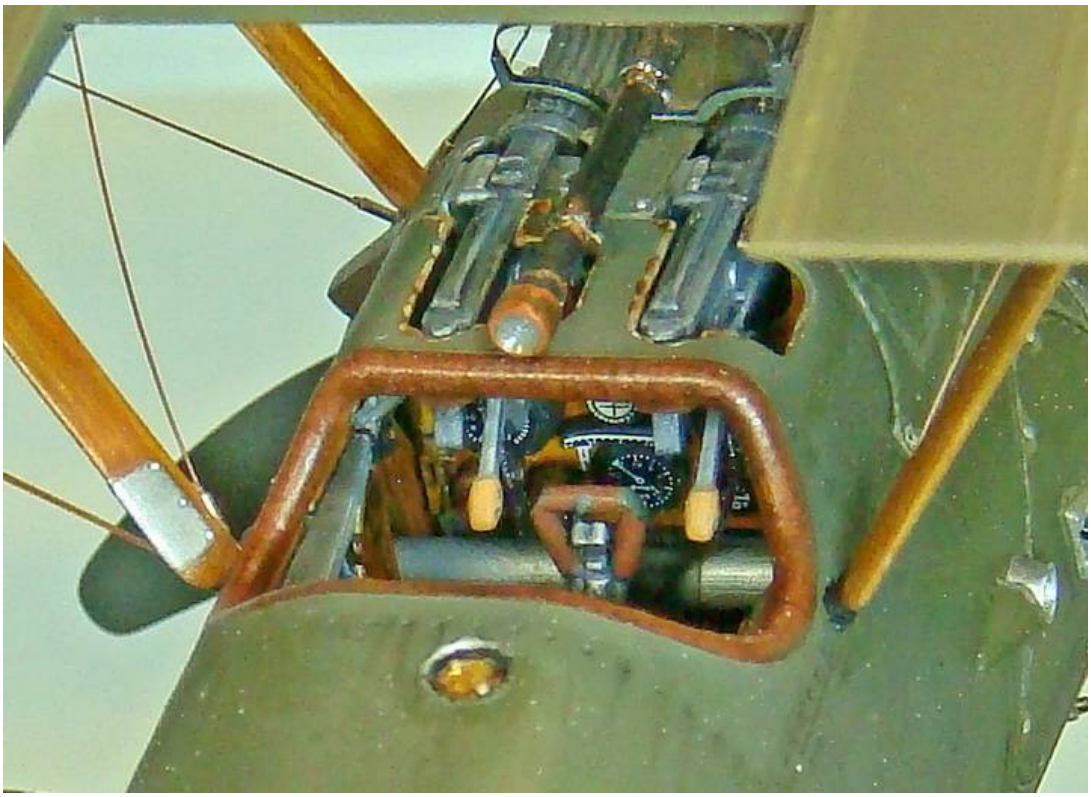
Ralph Nardone – Hasegawa – 1/72 scale F-4B and F-4N (In progress).


OLD CROW



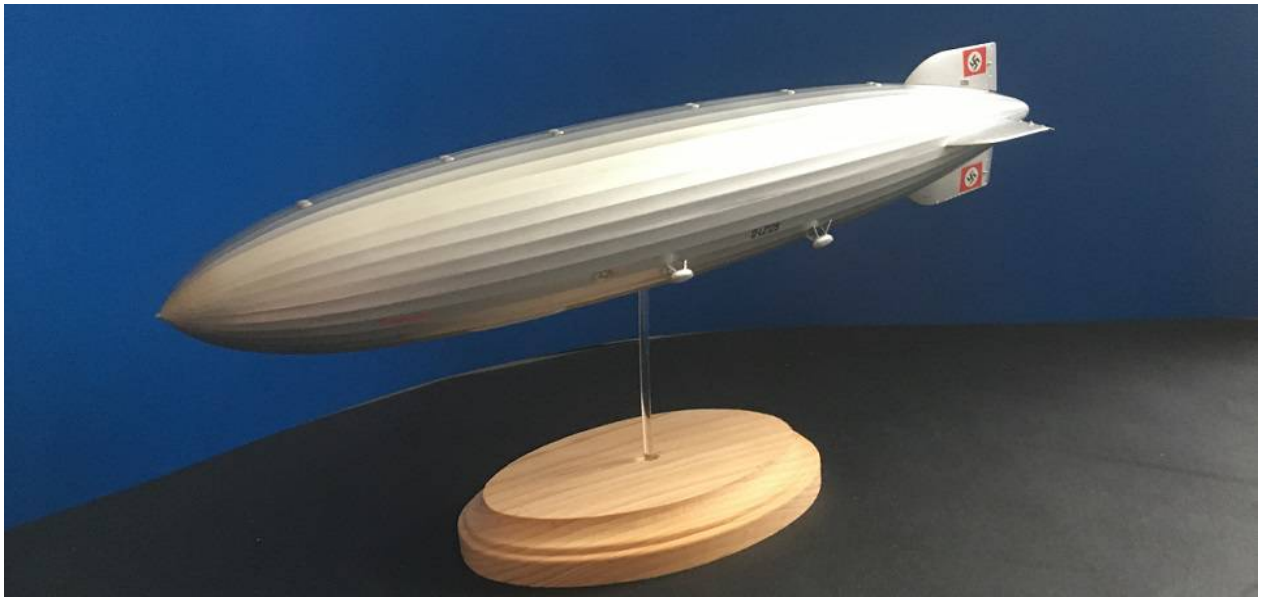
Darby Erd – Hasegawa – 1/72 scale Bud Anderson's P-51 B Old Crow.


D8250



Mike Roof – WingNut Wings – 1/32 scale Sopwith Camel, E.W. Springs 148th Aero Squadron USAS.

Rick Broome – Lindberg – Alien and the Red Planet (In progress).


John Currie – Revell – 1/720 scale Hindenberg (In progress)

Well thats all folks

John