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April 2018

International Plastic Modelers' Society/USA
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Applications should be printed and mailed to: IPMS/USA, P.O. Box 56023, St Petersburg, FL 33732-6023

Hello Swamp Foxes,

Welcome to March 2018 Newsletter.

I hope everyone has had plenty of time at the workbench over the last month and that we get to see your hard work at the next meeting, Wed 18th April in Lexington Main Library,
18.00 - 20.00, bring your Builds and Works in Progress.

The March meeting had 18 members attend. The President opened the meeting and covered the business agenda, on completion of the agenda, any other business was covered. Then it was on to members builds and in progress projects.
After a short break Ralph gave the Modeling 101 lecture, Part 2.
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Now from the Front Office

Greetings! For the next meeting, the business agenda will be short:

1. June Show items

a. Medals have been ordered—we went with 2" all around. The required 50% up front ($429.00) has been paid, and I've submitted to Tom for reimbursement.

b. We're working to tweak the Best Of award designs. We should have that done and the awards ordered by the end of the month.

c. We will need to start putting a Judging Corps together. I'd like volunteers to step up to the plate.

d. Please ask folks you know for sponsorships! We have received several trophy package sponsorships as of tonight: Northern Virginia and Eastern Carolina.

2. Constitution and By-Laws will be discussed and adopted. I don't want this to exceed about 15 minutes. I've already been advised of a few changes that we'll make, but I want to hear from each of you too.

3. Our recent changes (new officers and change of Chapter Contact information) have been communicated to our IPMS Regional Coordinator. I have e-mailed him for confirmation that the changes we requested, as well as our Charter Renewal, have been sent to the Home Office.

4. We will be applying for an IRS Employer ID Number to assist in our banking.

5. Once we have an EIN, we will be closing the current bank account and opening a new one.

6. I am investigating our status as a Non-Profit Organization with the State of South Carolina, and will apply for our certificate if we have not received one. There is a $25 fee associated with this.

7. I need to get some Name Badge information from you guys, so a sheet will be passed around for that. Once I have the info, I'll get with Lisa at the Trophy and Awards Center and get them working.

8. Those of you who paid your 2018 dues will get your membership cards.

9. Time allowing, we can discuss the possibility of a monthly raffle.

After that, we'll get on to with why we all come to the meetings—the models!

Tonight should wrap up Model Building 101. Next month, I would like to have a discussion on contests and judging. I have some program ideas that I'd like to see presented. I'd like to see some volunteers to present the following subjects:

1. Researching your subject. The modeling equivalent to the "Give a man a fish/Teach a man to fish" adage. (This one is mine, and I'll include a bit on writing articles for the newsletter)

2. Working with clear parts (I may tackle this one myself—stay tuned)

3. Scribing (Ditto)

4. Drawing panel lines (Darby? Any interest?)

5. Applying decals (Another one I may tackle, as I am close to this stage on a few of my models in work)

6. Realistic weathering

7. Bases, groundwork, and landscaping (Mike Roof has graciously agreed to present this one)

8. Rigging (John Currie, David Koopman, do you want this one?)

Let me know if you are interested in working up a presentation for the group.

One last announcement—I will be hosting an airbrushing clinic at the Two Notch HobbyTown on Saturday, 21 April, beginning at noon. Bring something to build, too, as this coincides with the normal Saturday Model Building Day at the shop.

Cheers!

Ralph

Club website - https://ipmsmidcarolina.com

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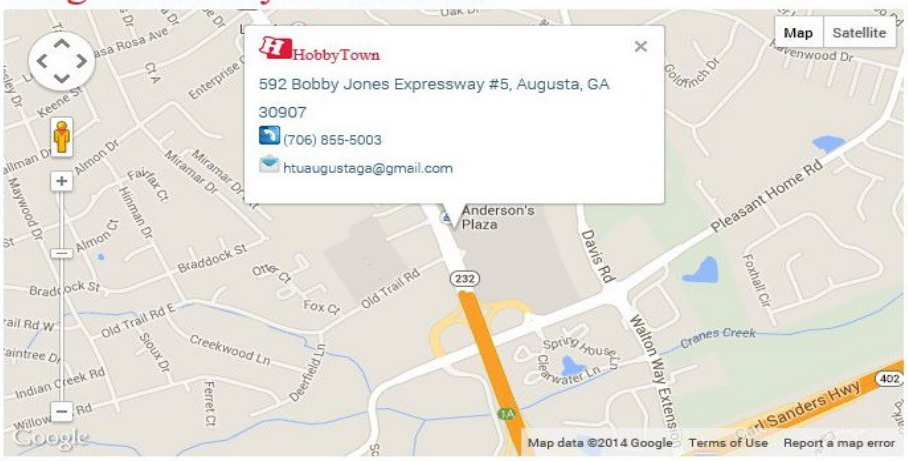
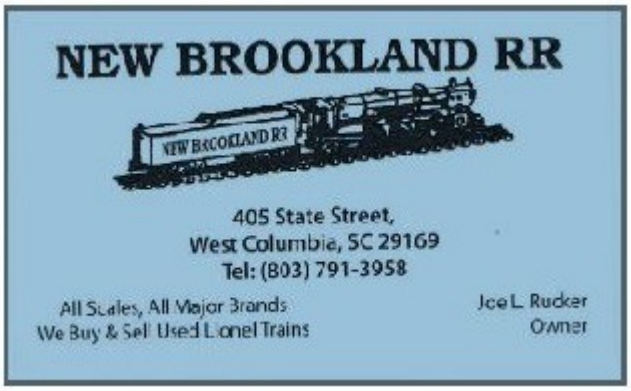




SUPPORT THE LOCAL HOBBY STORES

Swamp Fox: History of the 157th Fighter Squadron, 169th Fighter Wing, South Carolina Air National Guard, Part 1

The unit that would become the South Carolina Air National Guard's flying unit can trace its lineage back to the 350th Fighter Squadron of the 353rd Fighter Group. Initially based at Mitchell Field, New York on 1 October 1942, it trained with various models of Curtiss P-40 Warhawks before it was sent to war. Deployed to the European Theater of Operations, the unit flew Republic P-47D Thunderbolts and, later, North American P-51D Mustangs with both the VIII and IX Air Forces. Post war, the unit was inactivated in October 1945 at Camp Kilner, New Jersey.

On 24 May 1946, the unit was reactivated and re-designated the 157th Fighter Squadron, SE (Single Engine) and allocated to the National Guard of South Carolina. Federal recognition was gained on 9 December 1946, and the unit began operations with P-51D's from Congaree Air Base in Eastover, South Carolina. The unit became the South Carolina Air National Guard on 18 September 1947, when the U.S. Air Force became a separate branch of the military. It soon gave up its P-51D's for RF-51D aircraft (previously designated F-6A), and became the 157th Tactical Reconnaissance Squadron under the administrative umbrella of the 54th Fighter Wing of the Georgia Air National Guard. It was during this time that the unit was called up to Federal duty for the Korean Conflict, with the unit deploying to Lawson AFB, Georgia on 10 October 1950. The unit was incorporated into the 117th Tactical Reconnaissance Group; the other squadrons were the Alabama Air National Guard's 160th Tactical Reconnaissance Squadron (Lockheed RF-80A Shooting Star) and the Ohio Air National Guard's 112th Tactical Reconnaissance Squadron (Douglas RB-26 Invader). The unit would transition to the Lockheed RF-80A Shooting Stars at this time, in June 1951. What was supposed to be a brief training period turned into a lengthy wait, as their intended destination, Toul-Rosières Air Base in France, was nowhere near ready for operations of any kind, let alone jet operations.

Instead, the unit was assigned to Fürstenfeldbruck Air Base, near Munich, Germany starting on 27 January 1952 for the duration of its Federal duty. The unit was released from Federal duty on 9 July 1952. The unit inactivated in place and returned to Congaree AB with no aircraft.

Upon arrival in South Carolina, the unit was reassigned North American F-51H Mustangs—jet fighters were off fighting in Korea and in short supply, so most ANG units received piston-engine aircraft in the form of various types of the venerable North American Mustang. The unit was re-designated as the 157th Fighter Interceptor Squadron on 10 July 1952, and again re-designated as the 157th Fighter Bomber Squadron on 1 December 1952. The unit would operate a few F-80C Shooting Stars at this time, too, due to the high times on some of the Mustangs. Upon cessation of hostilities in Korea in June 1953, the unit began to receive North American F-86A Sabres. The unit received a handful of Sabres before the Air Force, realizing they had more need than airplanes, re-thought their assignments and reassigned the Sabres to active duty units.

Finally, in March 1954, the unit equipped totally with the F-80C's and sent the Mustangs and Sabres to other units. By January 1955, the last of the F-86A's were flown out. On 5 September 1957, the unit was re-designated 157th Fighter Interceptor Squadron and the South Carolina Air National Guard reached Group status as the 169th Fighter Interceptor Group.

In the first months of 1958, the unit retired the Shooting Stars in favor for a purpose-built interceptor aircraft, the North American F-86L "Dog Sabre," giving the unit an all-weather capability.

By this time, the Swamp Foxes had created quite a reputation within the Air National Guard as one of the best air defense units in the ANG. Because of this, when the Air Force released its Lockheed F-

104A Starfighters from active duty, the 157th was chosen as one of three units to operate the type. They received their first F-104 in February 1960. In July, the unit was assigned to the Aerospace Defense Command under the new “Gained Command” structure of the Air Force.

During a trip to Harrisburg, Pennsylvania to discuss issues with the F-104’s new GE J79 engines, the unit’s commanding officer, Brigadier General Barnie B. McEntire, Jr. had an in-flight engine emergency on 25 May 1961. Electing to stay with his stricken F-104, he managed to direct the airplane away from a populated area. He died in the ensuing crash, and as a result Congaree Air Base was renamed McEntire Air National Guard Base, the name it carries today.

Later, on 1 November 1961, the unit was called up for Federal duty again, this time for the Berlin Crisis. It would remain at McEntire until 24 November, when it would deploy to Moron Air Base in Spain. It would stand guard in Europe until it was again released from Federal duty on 15 August 1962, just in time for the Cuban Missile Crisis. The unit gave up its Starfighters to the active-duty Air Force in June 1963—the Air Force reassigned the aircraft to active duty interceptor units stationed at Homestead AFB, near Miami in response to the Cuban Missile Crisis—and re-equipped with the Convair F-102 Delta Dagger, The F-102 served with the unit until late 1974, when it began to be replaced with LTV A-7D Corsair IIs from active duty units converting to the Fairchild-Republic A-10A Thunderbolt II, beginning in October 1974. The last F-102 departed McEntire on 5 April 1975. Four days before that, the unit was re-designated 157th Tactical Fighter Squadron, in recognition of its new ground attack aircraft, and became gained by the Tactical Air Command. Likewise, the Group designation was changed to the 169th Tactical Fighter Group at this time. They would continue to operate the SLUF (Short little fat, er, fellow) until 1983.

In the early 1980’s, the Department of Defense released the Total Force Concept, where units of the National Guard would be assigned front line equipment and would be deployed with active duty units when needed. As a result, the 157th TFW, 169th TFG began to receive General Dynamics Block 1 F-16A Fighting Falcons, the first Air Guard unit to receive a new aircraft. As the A-7D’s were sent elsewhere, newer blocks (Block 10) F-16A’s were arriving at McEntire.

As the squadron gained experience with the type, they practiced some air-to-ground sorties and in 1989, the unit won the bi-annual Gunsmoke gunnery competition.

The unit continued to operate the Block 10 F-16A’s into the 1990’s. In 1991, the unit was once again called up for Federal duty, this time for Operation Desert Shield/Operation Desert Storm. The unit once again distinguished itself with a 90% mission rate.

In 1992, the Gained Command structure was changed to the Objective Organization structure, resulting in the unit’s re-designation as the 169th Fighter Group, 157th Fighter Wing, assets of the newly formed Air Combat Command.

In 1995, the Swamp Foxes received new Block 52 F-16CJ aircraft, equipped with the latest in targeting systems allowing the unit to perform multiple roles, including the Suppression of Enemy Air Defense (SEAD, formerly “Wild Weasel”) mission.

On 11 October 1995, the 169th was elevated to Wing status, becoming the 169th Fighter Wing. The unit has been deployed numerous times since Desert Storm. These missions have been in support of Operation Southern Watch, Operation Northern Watch, Operation Provide Comfort, and most recently as part of the Global War on Terror in Operations Enduring Freedom and Iraqi Freedom.

Modeling the aircraft of the 157th Fighter Wing

Here is a list of the recommended kits in 1/72 and 1/48 scale—there are others available for many of these, so if you favor a particular kit over the ones listed, go for it. Please note that I did not cover 1/32 scale, since no specific decals exist and not every airplane is available in that scale. If that's your scale of choice, take the advice later on when it comes to decals—obtain one of the available smaller scale sheets and use it to draw or source them same things in 1/32 scale.

If no scale is mentioned next to a manufacturer's name, they make kits in both scales.

P/F-51D: The new Airfix kits, although Tamiya's are also very nice.

RF-51D: Modification to any of the above kits.

RF-80A: Sword (1/72), Monogram F-80C, modified (1/48)

F-51H: RS (1/72), Classic Airframes (1/48)

F-80C: Sword (1/72), Monogram (1/48)

F-86A (if desired): Modification to any F-86F—Fujimi or Airfix (1/72), Hasegawa or Academy (1/48)

F-86L: Special Hobby (1/72), Modified Revell/ProModeler F-86D (1/48)

F-104A: Modification to any F-104C—ESCI, Monogram, or Hasegawa (1/72), Hasegawa (1/48)

F-102A: Meng (1/72), Monogram (1/48)

A-7D: Fujimi (1/72), Hasegawa (1/48)

F-16A Block 1 and Block 10: The easiest course of action in both 1/72 and 1/48 scale would be to modify the Hasegawa F-16A Block 15 kits with aftermarket small stabilators.

F-16CJ Block 52: Hasegawa or Revell AG/Monogram (1/72), Tamiya (1/48).

How to get there from here:

The F-51D's are easy—build the kits, add the 2016 IPMS/USA Convention decals, and voila!

To modify a P-51D to an RF-51D (F-6A) in either 1/72 or 1/48 scales, you'll need to add the camera apertures to the fuselage. Quickboost makes the conversions: 72-234 in 1/72 and 48-115 in 1/48 scale.

To modify the Monogram 1/48 scale F-80C to an RF-80A, you'll need a new nose and will need to relocate the cockpit. Fox 3 Studios lists an RF-80A Nose (4807) and an F-80A Basic Conversion, Deluxe Conversion, and a basic cockpit (4803/4815/4817) for the Monogram kit, and at one time C&H/Cygnus Conversions offered an RF-80C conversion for the Monogram (Revell) kit.

Hobby Boss made a 1/48 RF-80A, if you can live with the kit's other issues (misshapen inlets, massive fit issues, poor cockpit).

Special Hobby's 1/72 RF-80A is a nice kit, but you'll need to deal with the multi-media aspects of the kit. Nothing anyone with a few models to their credit can't handle.

The F-51H kits are both short run, multi-media kits. Again, you can do it. Whatever you do, avoid the Beechnut (1/72) and HpM (1/48) scale kits unless you like practice bleeding, as they are both horrible!

To modify an F-86F to an F-86A, you will need a new wing, aft fuselage, and windscreen. Cutting Edge (1/48 only) and Kiwi Resins (1/72 and 1/48) offered conversion sets in the past, but they are discontinued. In any case, I tend to ignore the early Sabres in ANG service unless the unit has

documented history longer than a few months with the type (Colorado, for instance), since they were few in number and not in service long before they were returned to the active USAF.

To modify the 1/48 F-86D to an F-86L, you'll need to extend the wing. Use the Revell Germany kit (or one of the releases that builds into the Block 45 or later airframes) and either extend the wings with Evergreen sheet (you'll need to fill and sand some panel lines, too) or wrestle the Hasegawa 1/48 F-86F-40 wing into place. Add the SAGE blade antenna. (As a trade-off, you can then use the Revell wing to build the Hasegawa kit as a slatted, narrow-chord winged Sabre.

Revell's wing is swept slightly too much—you can either correct it during the kitbash, or leave well enough alone and deal with it as-is. I won't tell.)

Special Hobby's F-86L is another case of build it, cobble up the SCANG markings, and move along. The slats are molded closed, but an advanced modeler can cut the slats out and drop them if desired.

To modify any F-104C to an F-104A, simply create a plug over the gun muzzle.

The F-102A's and A-7D's follow suit from the F-51D's—build the kits, add decals, and call it good.

To get a Block 1 F-16 in 1/72 scale, use the Hasegawa F-16A Block 15 kits with the Quickboost Block 1/5/10 stabs (72-196). That is the easiest way to get the job done, but there is another alternative if you are also building an SCANG F-16C. Simply rob the small stabs from either the Hasegawa or Revell AG/Monogram F-16C kit and use them on the Hasegawa F-16Akit. You can still build the donor kit without them, as the F-16C doesn't use the small stabs.

To backdate the Hasegawa 1/48 scale F-16A Block 15 kit, use the Quickboost Block 1/5/10 stabs #48-240. Simple, isn't it?

For those who think it would be easy to backdate any Tamiya F-16C (in either scale) to an F-16A, it takes a lot more work than you might think. In 1/48 scale, start with the F-16C/N Aggressor/Adversary or the F-16C ANG Block 25/30 kit. KASL Hobby does a conversion for the NATO F-16A MLU, most of it will be useable except the vertical tail—the conversion features the extended parabrake housing. Fortunately, they also offer a standard tail for the Academy and Hasegawa kits that should work on the superb Tamiya kit with only a little fettling. DACO Products has been making noise about a tail conversion since 2009, but we've seen nothing yet. Sierra Hotel Models has also been teasing the world with a couple of F-16A conversion sets (Block 1/Block 10 and Block 15) for a few years, but nothing yet. There are some detail differences between the A and C model F-16's, so you'll have a lot of work to do, even with a conversion set.

In 1/72 scale, you're on your own to backdate a Charlie model to an early-Block F-16. Remember that Tamiya's 1/72 kit is a Block 50 jet (complete with the MCID and GE exhaust), so you'll have to scrounge the NSI and Pratt exhaust, plus remove the heavyweight landing gear and get the attendant subtle shapes correct.

As I stated earlier, this is no mean feat in either scale, so here's a word to the wise: Buy the Quickboost stabs (or rob the Hasegawa or Revell AG/Monogram F-16C kit in 1/72 scale) and install them on the Hasegawa Block 15 kit for your scale. It is as close to painless as it gets.

Otherwise, in 1/72 scale ESCI, Hasegawa, Italeri, Monogram, and Revell all offered early F-16 kits (most were based on the prototypes or Full Scale Development airframes, not production models) that you could use as a basis for your model. Most of the kits still have the original Stencel SIIIS seat in place of the later ACES II, and some still have the split nose landing gear doors and early antenna

locations. Of those named, the Italeri kit is probably the best to start with, followed by the Revell kit. The Revell kit gives you lots of "stuff" as a bonus, as the kit contains a tug and oodles of ordnance. The first issue also has that snazzy red/white/blue paint scheme featured on the box top, one of Revell's first kits to not feature box art.

In 1/48 scale, ESCI, Monogram, Revell, Tamiya, and Otaki issued kits—again, they are older kits based on Prototype or FSD airframes and will take some work to update. Given that the Hasegawa kits—regardless of the fact that they were released in the 1980's—are still quite nice, why do work you don't have to undertake? The Quickboost stabs are plug and play, no fuss, no muss.

If you are anal retentive on cockpits, you'll need to source replacements and adapt them to the Hasegawa kit (in either scale), but quite honestly, I don't sweat the small differences between the Block 1/5/10 and Block 15 Vipers.

For those on a budget, you can also cut down the larger stabs. Install the larger ones on the fuselage and mark the stab where the trailing edge of the speed brake meets it. Draw a straight line, parallel to the stab TE, from the root to the tip. Where this line intersects the lopped corner of the larger one, draw a line parallel to the larger stab tip. Finally, where that meets the leading edge, strike a line parallel to the leading edge back to the root. Cut the areas away and re-contour the cut-down stab.

The F-16C's are a bit of a mixed bag, and require a brief discussion…

The first F-16C's were the Block 25 airplanes, and, like the A models, were powered by the Pratt and Whitney F100 turbofan. With the advent of the Block 30's, it was decided to offer the GE F110 turbofan engine as an alternate powerplant. Originally, it was supposed to be an either/or thing, but in reality it wasn't so. A larger inlet, the MCID (Modular Common Inlet Duct, or the "wide mouth") was fitted and intended for both powerplants. However, it was found that the Pratt engine couldn't take the additional air so the original inlet, the NSI (Normal Shock Inlet, or the "small mouth") was kept for the Pratt-powered versions; these aircraft were given the Block

32 designation. The same nomenclature trend continued through the subsequent Blocks—40/42, 50/52—where X0 represents the GE powered aircraft and X2 represents the Pratt powered jets.

Also, beginning with the Block 40 airplanes, a heavyweight landing gear was fitted to accommodate higher gross takeoff weights, as the jets became more of a multi-role airplane.

With that being said, what are the options?

For a 1/48 F-16CJ, the answer is simple. Get the Tamiya "Thunderbirds" Block 32/52 kit. Follow the kit instructions (make sure you use the parts for the heavy weight landing gear, since the kit has a Block 32 Thunderbirds option!). Add some HARM's, maybe an HTS pod (the missiles and pod will have to come from the aftermarket, since they aren't in the kit), and SCANG decals.

In 1/72, it is a little more convoluted. You have the option of the Hasegawa or the Revell AG/Monogram F-16C kits, neither of which gets you all the way home...

Hasegawa's is technically a Block 50, but (at least) kit number 00448 contains the NSI inlet and Pratt exhaust, since it is basically Hasegawa's F-16A kit with some new sprues. As a result, it contains the NSI and Pratt exhaust, but it still isn't 100%, dead-nuts accurate. It does, however, do the job adequately for all but the most rabid Viper fan. The kit includes a good attempt at the heavyweight landing gear—well, sort of. You get the beefed up struts, wider wheels, and bulged MLG doors, but the kit missed a subtle "pre-bulge" on the sides of the inlet. They also missed the beefed-up nose strut.

Honestly, unless it really bothers you, you can ignore the discrepancy.

The 1/72 Monogram kit was released in around 2003, but had previously been marketed by Revell AG as far back as 1997. It, too, is more akin to an F-16A (specifically since the same basic kit had been originally issued as various NATO Midlife Upgrade F-16A MLu aircraft), but includes both the MCID and NSI inlets and both exhaust cones. It lacks the bulged main landing gear doors and the heavy weight landing gear featured on the Block 40 and later F-16C's. You can either try to fix the situation or you can ignore it. In the end analysis, it is your model, and, well, if it doesn't bother you…

Of course, we can always wait to see if Tamiya will do the Block 52 F-16C in 1/72 scale to go along with their Block 50 kit. If you are feeling froggy, you can try to mate the Hasegawa or Revell AG/Monogram NSI and Pratt exhaust to the Tamiya Block 50 kit. The added bonus is that you can still build the donor kit as a Block 30 jet…

Note that the unit's jets now have the -229 engine, and the exhaust feathers are carbon fiber, so color them accordingly. The only item you may need to source would the HTS targeting pod that is used with the HARM.

If adding photoetched details and resin cockpits are your bag, by all means do so…

Decals

For decals, a quick search shows the following—many of these are out of print, and have been for years:

The 2016 IPMS/USA Convention Decal featured a SCANG F-51 in both 1/72nd and 1/48th that could be adapted to the RF-51D and F-51H, and possibly the RF- and F-80's, too.

Victory Productions sheet 48-005 has options for SCANG F-104A's that may also be adapted to an F-104B two-seat trainer. Since the majority of the markings were letters and numbers (and titles), they would be easy to create in 1/72 scale using letter/number and title sheets. You'll have to source the unit, command, and ANG markings. Use the Victory sheet instructions (or a copy thereof) to draw your own, or try to rob other sheets for the markings you might need.

DRAW Decal offers sheets 72-F102-1 and 48-F102-1 to dress up your F-102 kits destined for the ADC Aircraft Gray scheme. You're on your own for the SEA Camouflage, but it is fairly easy to do using various letter/number and insignia sheets.

Microscale sheet 72-304 offers the option for a SCANG A-7D. As with the F-104's, you could use the instruction sheet to come up with what you need in 1/48 scale (as well as the camouflage scheme).

Microscale sheets 72-454 and 48-230 depict early SCANG F-16A's (narrow tail band with stencil "South Carolina" and "SC" tail code), while sheets 72-608 and 48-386 show the later paint scheme with the Darby Erd-designed "South Carolina" band on the tail and carry "World Champions--Gunsmoke '89" titles.

TwoBobs produced sheet 48-070 ("F-16C OIF Swamp Foxes") with the later modified "South Carolina" tail band (rounder, common font letters).

Reid Air Publications/Speed Hunter Graphics produced sheets 48-007 ("SEAD Specialists," with the same basic design as the TwoBobs sheet depicts) and 48-013 ("Heritage Vipers" with the Swamp Fox and Wild Weasel on the tail) depicting SCANG F-16C's.

All the rest of the markings will have to be done the old fashioned way—you'll need to "roll yer own" decals for the airplane desired. Expert's Choice used to offer sheets with various types of the ANG insignia, both the disc and shield with the Minuteman. Several companies offered/offer letter/number sheets in various sizes/colors, too, which come in handy when doing this kind of thing. At the very least, get a few black, white, and gray letter/number sheets. They'll be valuable on many other models, not just these. You can use kit decal insignia or buy aftermarket decals as needed. Same goes for the TAC shield. You'll need to rob the sheets that feature SCANG airplanes for the unit shield and the Fox Head if it was applied to the airplane in question. Look around, ask around, and shop around, and you're bound to come up with what you need.

And, finally, a little assistance identifying "what" and "when" in period photos:

The early F-51D's would have only carried "SC NG" titles, since the unit predates the establishment of the Air Force as a separate branch in 1947. That's a good way to tell which time frame the photo depicts—if it says "ANG", it is post-September 1947.

Photos of SCANG RF-51D's and RF-80A's are hard to come by if all you look for are the SCANG titles—you won't find them marked that way. Back in the '50s and '60s, when aircraft were under state control, they carried ANG titles (as in "SC ANG"), but when called to Federal duty, they wore "United States Air Force" and "USAF" titles.

South Carolina's F-104's carried both varieties, as the airplanes were assigned a few months before the unit was federalized in 1961.

The unit, like most F-102 units, operated airplanes with both the Case X ("Case Ten") and Case XX ("Case Twenty") wing types. Look at the serial number of the airplane to determine which wing it had—the Case XX wing was used beginning with serial number 56-1317. All earlier aircraft had the Case X wing (and if you are brave enough to tackle the conversion to a TF-102A, the first use of the Case XX wing was on S/N 56-2336). They were not retrofitted, so if "your" Deuce came from Convair with a Case X wing, it kept the Case X wing forever. And yes, there is some speculation that the break in Serial Numbers wasn't that neat. So, how do you tell? The Case X wing has an upturned wingtip and the outboard elevon break line was parallel to the aircraft's centerline. The Case XX wing featured a leading edge that was cambered all the way along the length of the wing which resulted in downturned wingtips, and the outboard elevon break was angled outward. Be advised that the airplane painted in SCANG colors now residing in the Carolinas Aviation Museum in Charlotte is a very early F-102A with a short tail and small speed brakes—the SCANG never operated F-102's in this early configuration. Finally, the SCANG Deuces appeared in both the original ADC Gray scheme and the later T.O. 1-1-4 "Southeast Asia" camouflage scheme, regardless of which wing the airplane had.

The SLUF's were all in standard Southeast Asia camouflage. At some point, the "SC" tail codes were changed from white to black.

The F-16A's were in the standard three-color F-16 Compass Ghost Gray scheme.

Pay attention to the later F-16C's—you have to make sure what you're looking at is the original three-color camouflage, the later two-color scheme, or the new "Have Glass" scheme, as the unit has operated F-16C's in all three schemes.

Next time: Photos and a few diagrams.

Cheers! Ralph

German Goliath Tracked Mine.

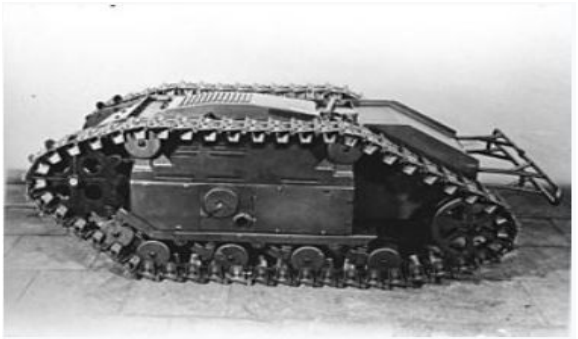
The Goliath tracked mine - The German name: Leichter Ladungsträger Goliath (Goliath Light Charge Carrier) was a name given to two German Unmanned ground vehicles. disposable demolition vehicles, used during World War II. These were the electrically powered Sd.Kfz. 302 and the petrol-engine powered Sd.Kfz. 303a and 303b. They were known as beetle tanks to the Allies.

Employed by the Wermacht during Worl War II. They carried 60 or 100 kilograms (130 or 220lb) of high explosives, depending on the model, and were intended to be used for multiple purposes, such as destroying tanks, disrupting dense infantry formations, and the demolition of buildings or bridges. Goliaths were single-use vehicles that were destroyed by the detonation of their warhead.

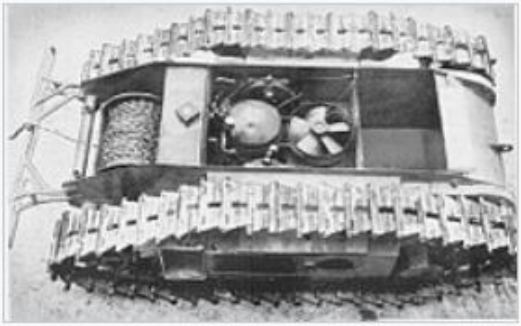
Development,

During and after World War I, a number of inventors devised small, remote-controlled, tracked vehicles intended to carry an explosive charge. During the war, the French developed two vehicles. The Crocodile Schneider Torpille Terrestre carried a 40-kilogram (88lb) explosive charge and saw limited combat use in June 1916. However, it performed poorly as was eclipsed by the first tanks, then being introduced. The Aubriot-Gabet Torpille Electrique was driven by a single electric motor powered by a trailing cable. This vehicle may have been steered by clutch control on its tracks, although early versions may have lacked steering. This may not have mattered as its task was simply to cross No mans land to attack the long trenches of the enemy. The Wickersham Land Torpedo was patented by American inventor Elmer Wickersham in 1918 and in the 1930s, a similar vehicle was developed by the French vehicle designer Adophe Kegresse.

In late 1940, Kégresse's prototype was recovered by the Germans near the Seine; the Wehrmacht's ordnance office directed the Carl F.W. Borgward automotive company of Bremen, Germany to develop a similar vehicle for the purpose of carrying a minimum of 50 kilograms (110lb) of explosives. The result was the SdKfz. 302 (Sonderkraftfahrzeug, 'special-purpose vehicle'), called the Leichter Ladungsträger ('light charge carrier'), or Goliath, which carried 60 kilograms (130lb) of explosives. The vehicle was steered remotely via a joystick control box. The control box was connected to the Goliath by a 650-metre (2,130ft), triple-strand cable attached to the rear of the vehicle. The cable was used both for control and for transmitting power to the electric driven version. Two of the strands were used to move and steer the Goliath, while the third was used for detonation. Each Goliath was disposable, being intended to be blown up with its target. Early model Goliaths used an electric motor but, as these were costly to make (3000 Reichsmarks) and difficult to repair in a combat environment, later models (known as the SdKfz. 303) used a simpler, more reliable gasoline engine.



An *SdKfz*. 303, the petrol powered version of the *Goliath*



The interior of a Goliath, *SdKfz.* 303, showing the petrol engine, control cable reel and the space for the warhead. US Department of Ordnance - *Catalog of Enemy Ordnance Manual Vol. 1* - 1945

Service

Goliaths were used on all fronts where the Wehrmacht fought, beginning in early 1942. They were used principally by specialized Panzer and Combat Engineer units. Goliaths were used at Anzio in Italy in 1944, and against the Polish resistance during the Warsaw Uprising in 1944. A few Goliaths were also seen on the beaches of Normandy during D-Day, though most were rendered inoperative due to artillery blasts severing their command cables. Allied troops also encountered a small number of Goliaths in the Maritime Alps following the landings in southern France in Auguat 1944, with at least one being used successfully against a vehicle of the 509th Parachute Infantry Battalion.

Although a total of 7,564 Goliaths were produced, the single-use weapon was not considered a success due to high unit cost, low speed (just above 6 miles per hour (9.7km/h)), poor ground clearance (just 11.4 centimeters), the vulnerable control cable, and thin armour which could not protect the vehicle from small-arms fire. The Goliath was also too big and heavy to be easily man-portable. Mostly, they failed to reach their target although the effect was considerable when they did.

Large numbers of Goliaths were captured by the Allies. Although they were examined with interest by Allied intelligence, they were seen as having little military value. Some were used by the United States Army Air Force as aircraft tugs, although they quickly broke down as the disposable vehicles were not designed for sustained use.

The Goliath did help lay the foundation for post-war advances in remote-controlled vehicle technologies.

Romanian version

During 1944, Romania designed and built its own model of remote-controlled tracked mine, known as "Romanian Goliath", due to lack of information about its actual name. However, it was markedly different from its German counterpart. The few surviving photos show that the vehicle had no armor, and it is not known if that was ever changed. It did have some logistical improvements, however, as the Romanian-designed chassis allowed it to cross trenches and craters much better than its German counterparts. Little is known about the stats of this Romanian vehicle, aside from the fact that it never went beyond the prototype stage and that it weighed about two tons.

Surviving Examples.

Surviving Goliaths are preserved at:

The Museum of World War II, Massachusetts, USA.

The United States Army Ordnance Museum.

Karl Smith collection, USA.

the Imperial War Museum, Duxford, UK.

The Tank Museum, Bovington Camp, UK.

The REME Museum, UK.

The Musée du Débarquement Utah Beach, Normandy, France.

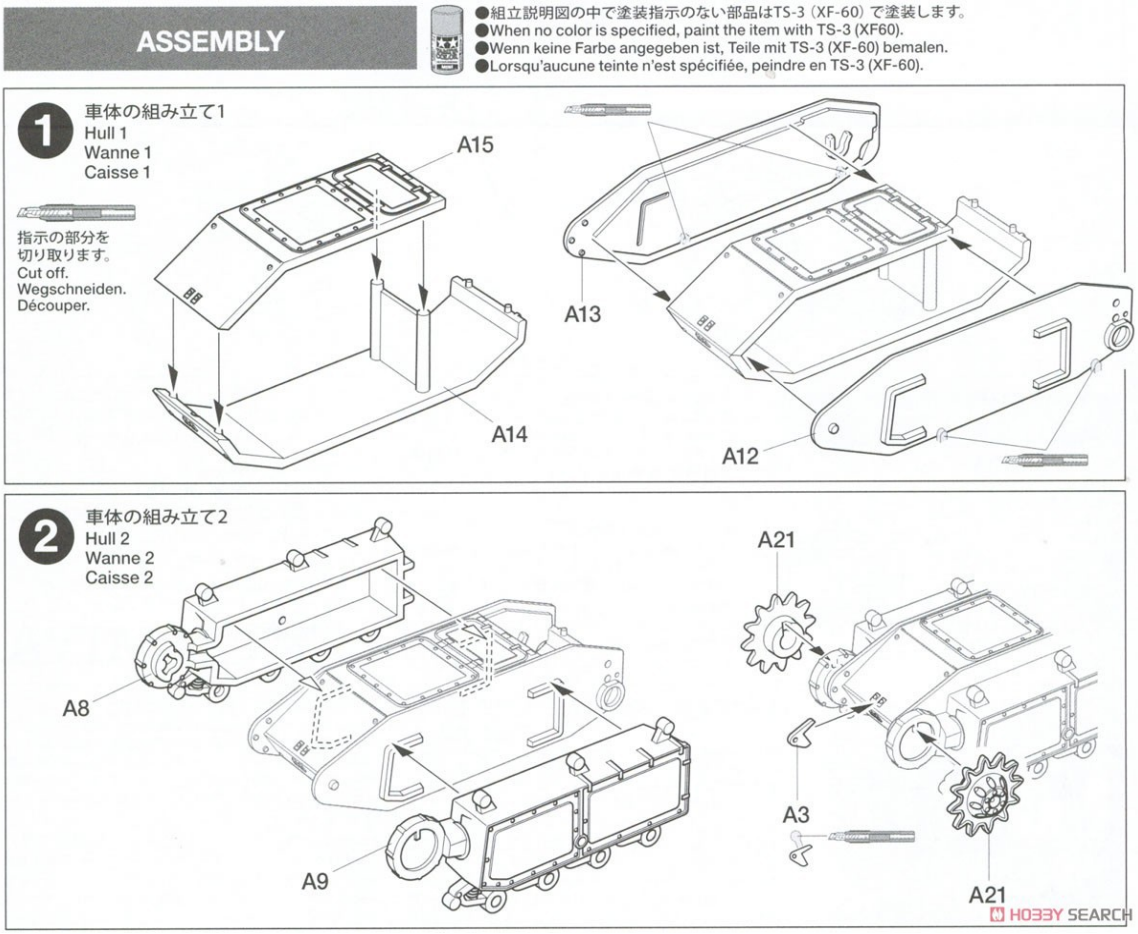
Musee No. 4 Commando, Ouistreham, Normandy, France.

The Canadian War Museum, Ottawa, Ontario, Canada.

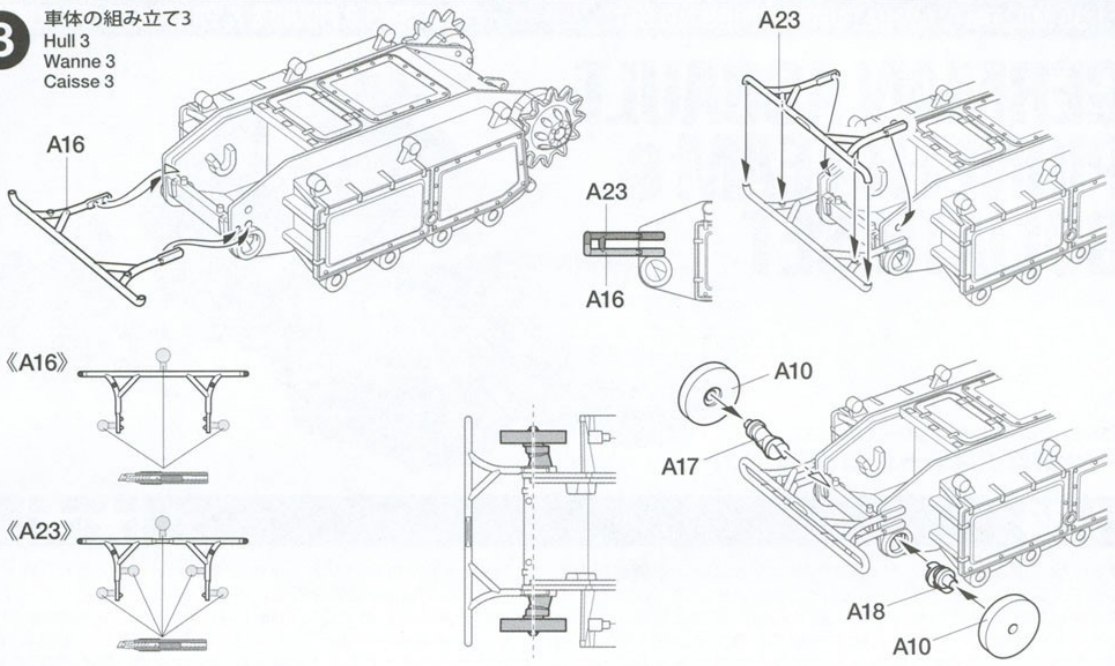
Fort Garry Horse Museum, Winnipeg, Manitoba, Canada.

There are also a further 18 examples spread throughout, Germany, Poland, Russia, Netherlands, Belgium, Slovakia. France and Sweden.

Modeling the German Goliath Tracked Mine.



3 車体の組み立て3
Hull 3
Wanne 3
Caisse 3



4 履帯の取り付け
Attaching tracks
Ketten-Einbau
Mise en place des chenilles

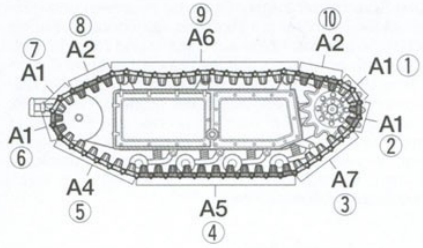
注意！ CAUTION

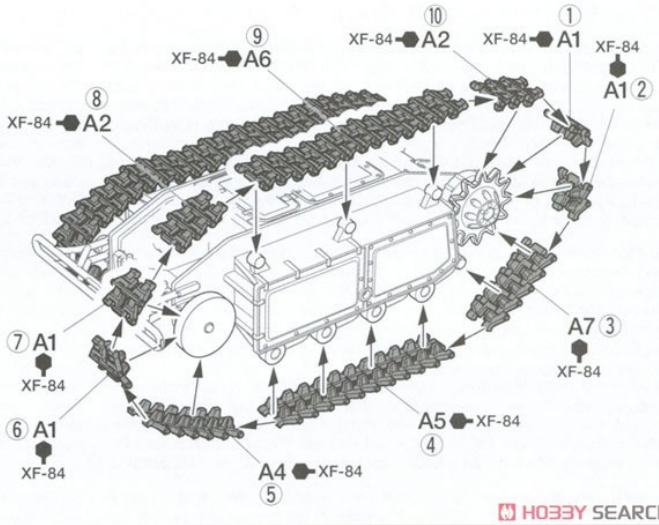
★履帯部品は特に精密に作られているため、切り取り、取り付けの際は十分注意してください。また切り取った部分を丁寧に仕上げてから取り付けてください。
★Cut off track parts with care and ensure there is no excess plastic left before attaching.
★Kettenteile vorsichtig abtrennen und sicherstellen, dass keine überstehenden Plastikreste den Zusammenbau behindern.
★Prélever les pièces de chenilles avec soin et s'assurer qu'il ne reste pas de plastique excédentaire avant de fixer.

注意！ NOTICE

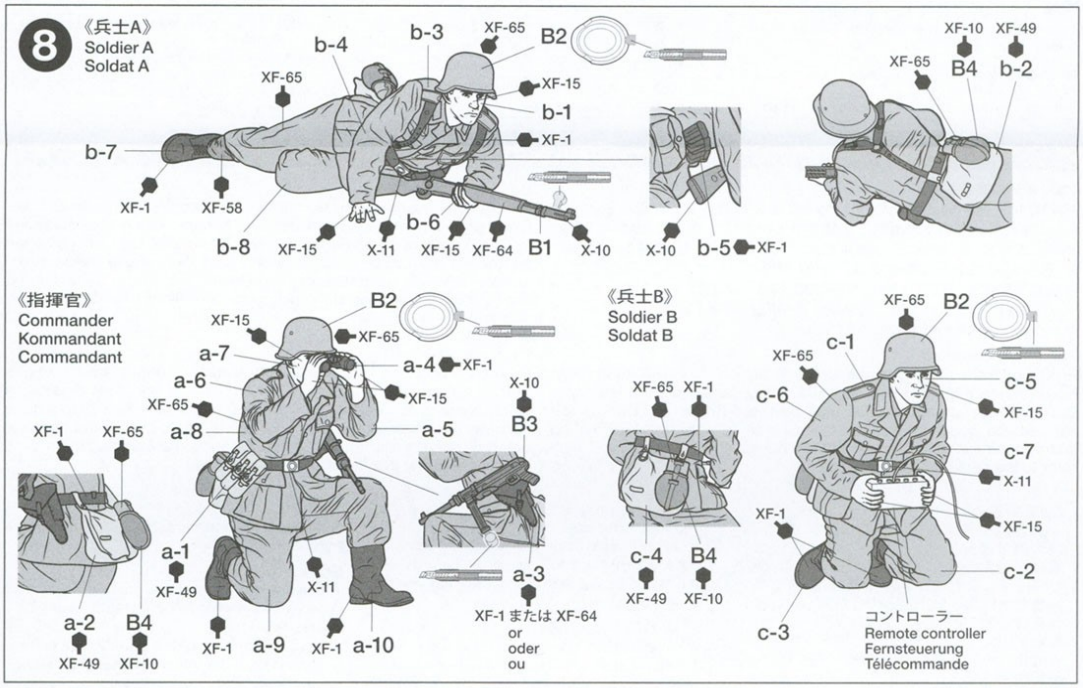
★指示の番号、①～⑩の順で取り付けます。
★Attach parts in numbered order ①～⑩.
★Die Teile in der nummerierten Reihenfolge ①～⑩ anbringen.
★Fixer les pièces dans l'ordre des numéros ①～⑩.

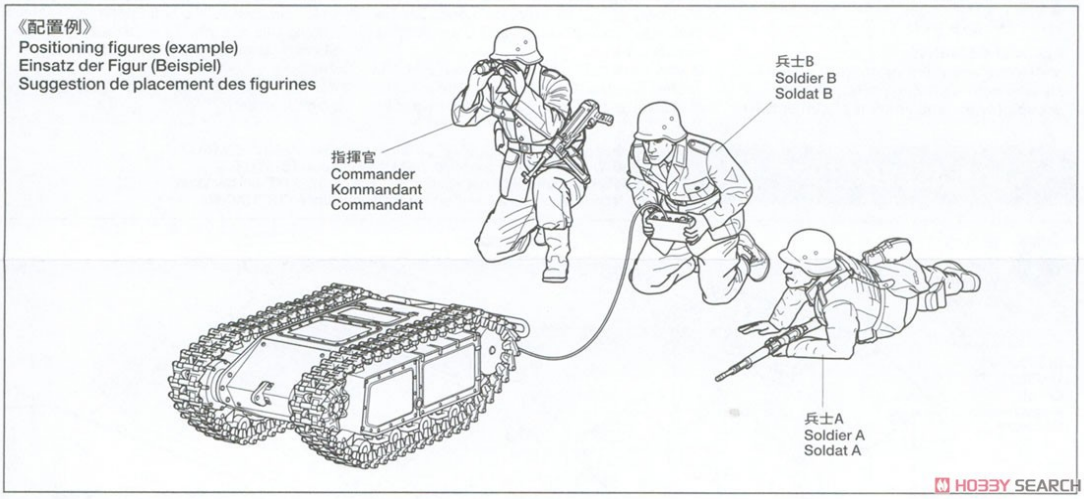
★反対側も同様に取り付けます。
★Attach other side in the same manner.
★Die andere Seite auf gleiche Weise anbringen.
★Fixer l'autre côté de la même manière.

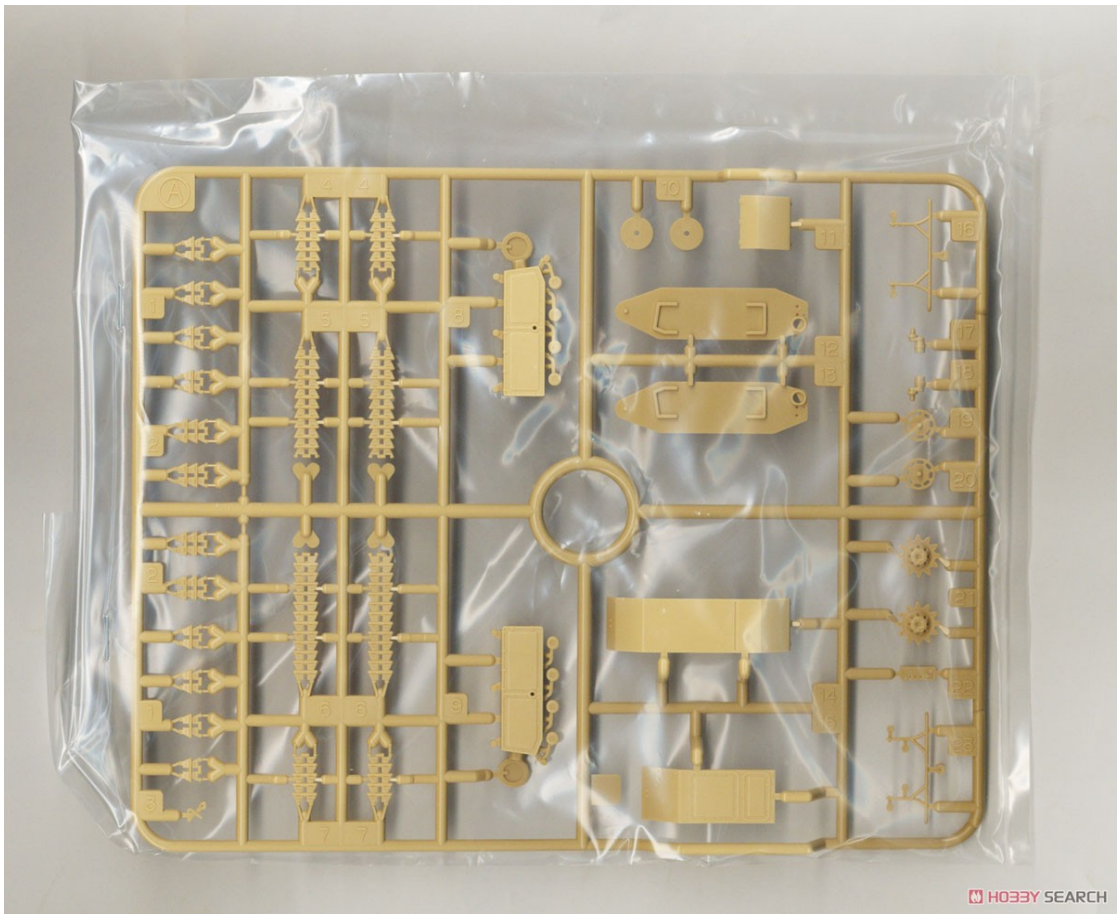




HOBBY SEARCH

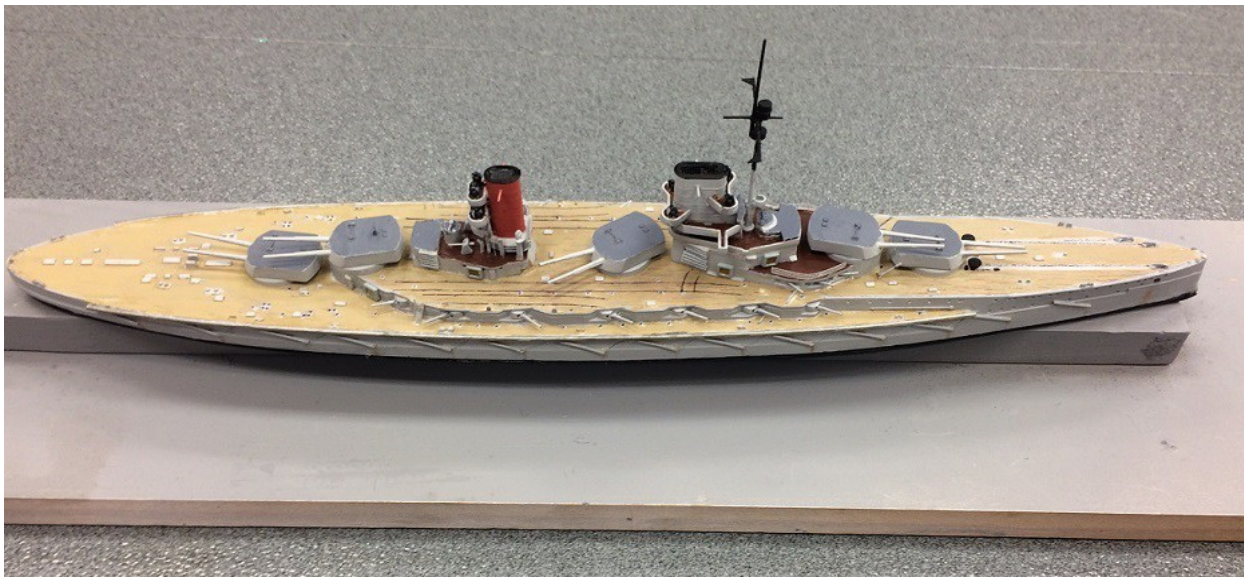

8
《兵士A》
Soldier A
Soldat A
b-4
b-3
XF-65
B2
XF-65
XF-15
b-1
XF-1
b-7
XF-1
XF-58
b-6
b-8
XF-15
X-11
XF-15
XF-64
B1
X-10
X-10
b-5
XF-1
XF-10
XF-49
XF-65
B4
b-2
《指揮官》
Commander
Kommandant
Commandant
B2
XF-15
XF-65
a-7
a-4
XF-1
a-6
XF-65
XF-15
a-8
a-5
X-10
B3
XF-1
XF-65
a-1
XF-49
X-11
a-3
XF-1 または XF-64
or
oder
ou
a-2
B4
XF-49
XF-10
XF-1
a-9
XF-1
a-10
《兵士B》
Soldier B
Soldat B
XF-65
XF-1
c-4
B4
XF-49
XF-10
XF-65
B2
c-1
XF-65
c-6
c-5
XF-15
c-7
X-11
XF-1
XF-15
c-2
c-3
コントローラー
Remote controller
Fernsteuerung
Télécommande


《配置例》
Positioning figures (example)
Einsatz der Figur (Beispiel)
Suggestion de placement des figurines
兵士B
Soldier B
Soldat B
指揮官
Commander
Kommandant
Commandant
兵士A
Soldier A
Soldat A
HOBBY SEARCH

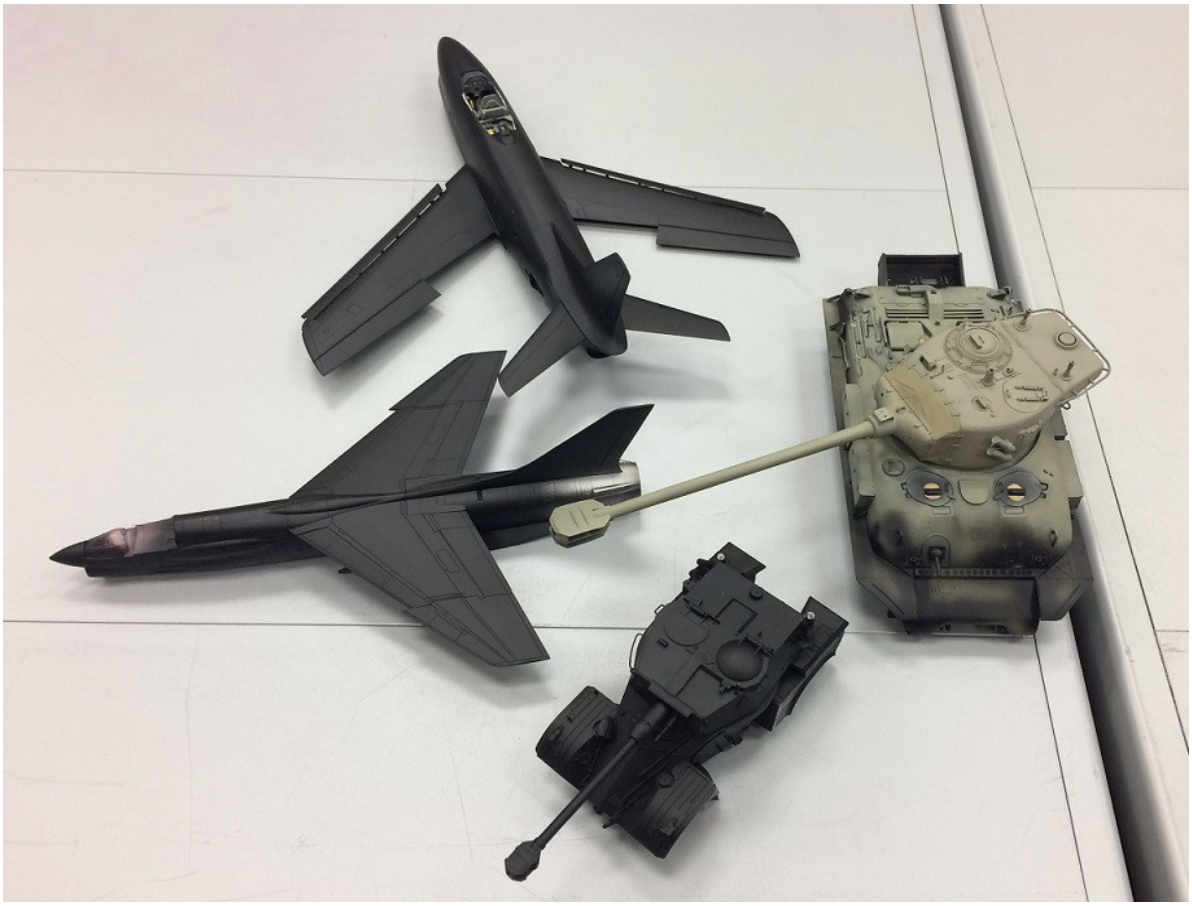


Cheers! John Currie

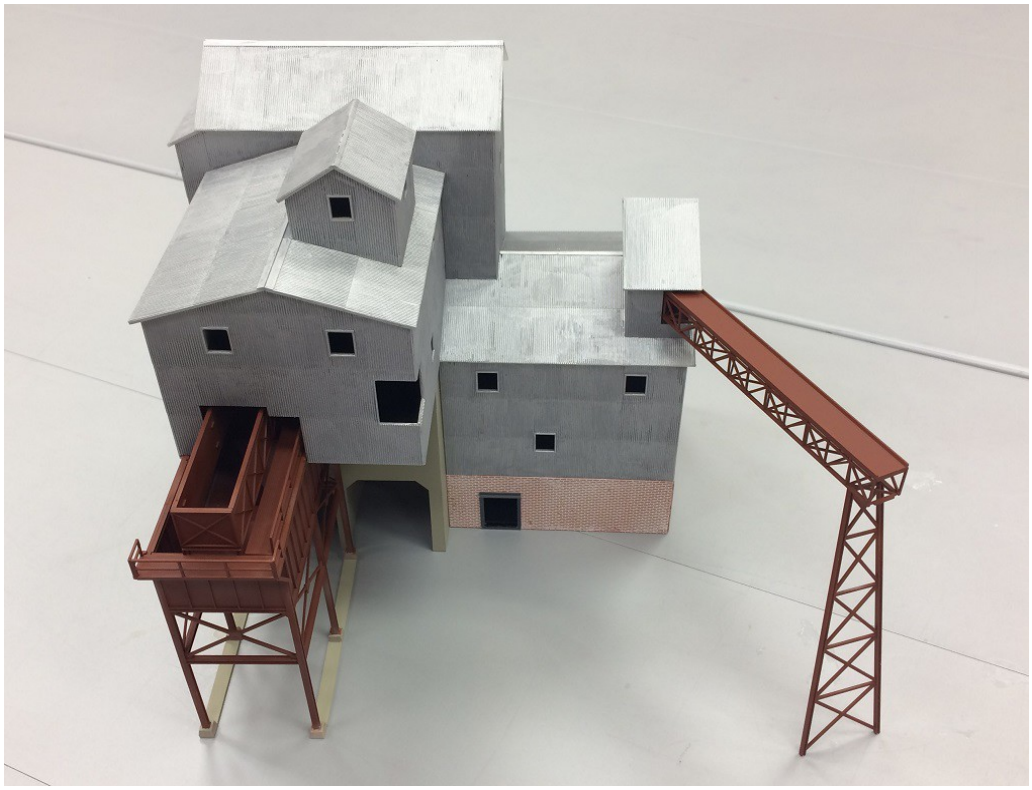
Members Models

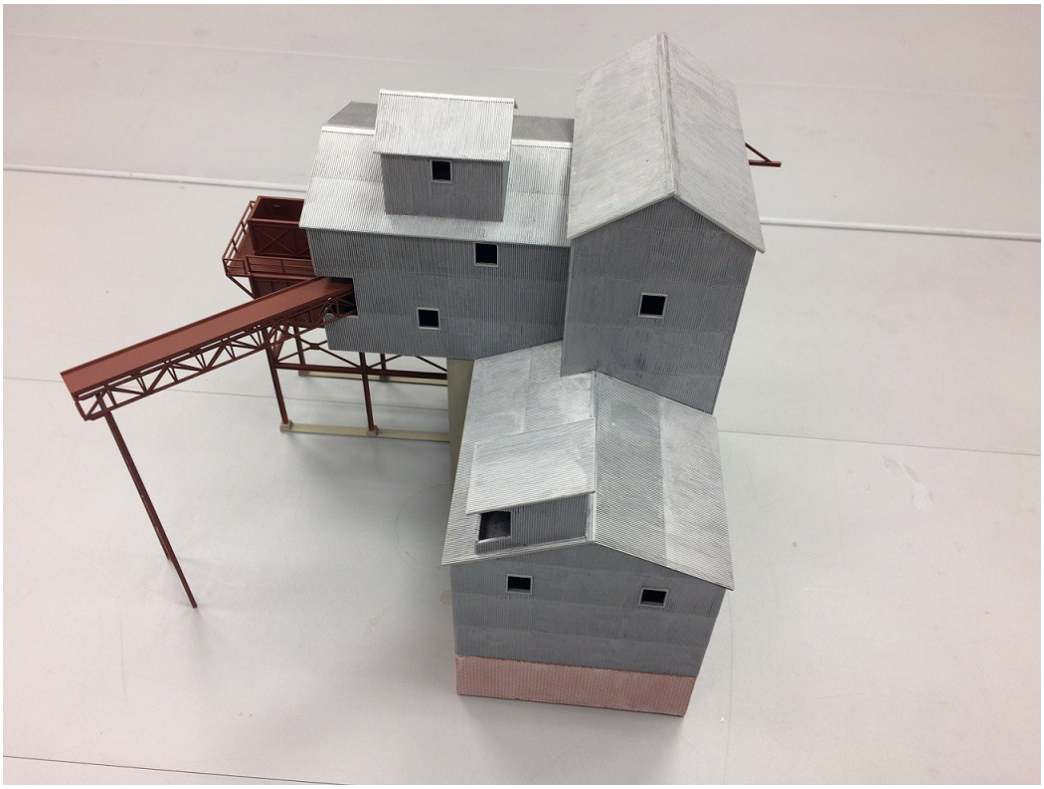


David Koopman - ICM - 1/700 Scale Grosser Kurfurst (WIP)



Matthew Goodman - Takom - 1/35 scale AML-90. Academy - 1/35 scale M-51. Revell - 148 scale F-86D. Academy - 1/72 scale F-8J Crusader. (WIP)

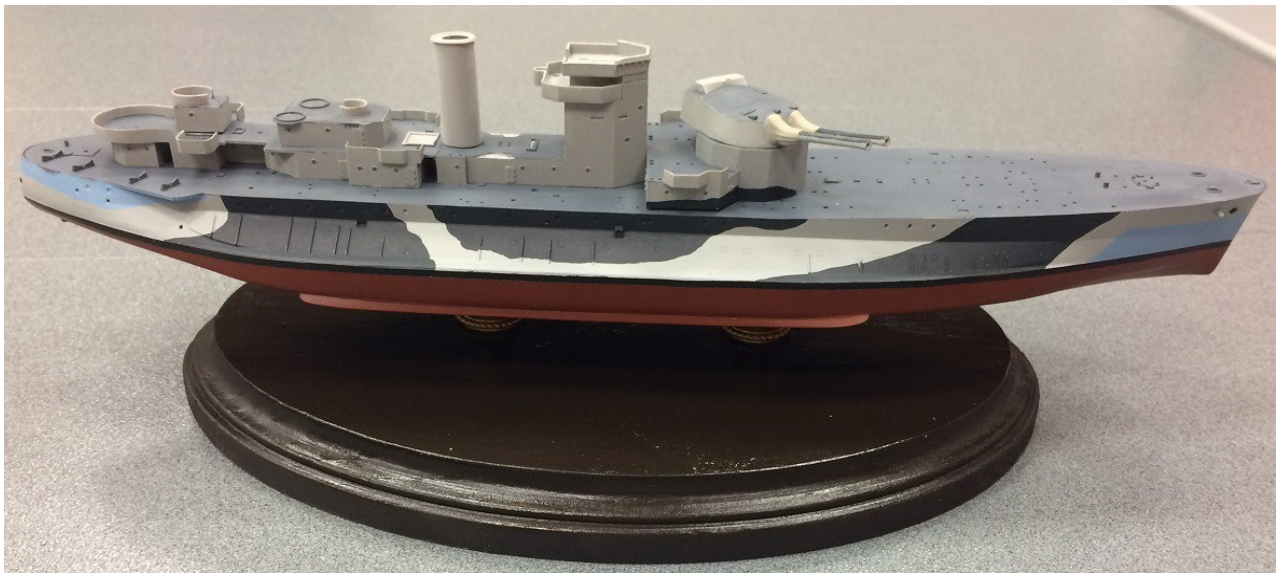


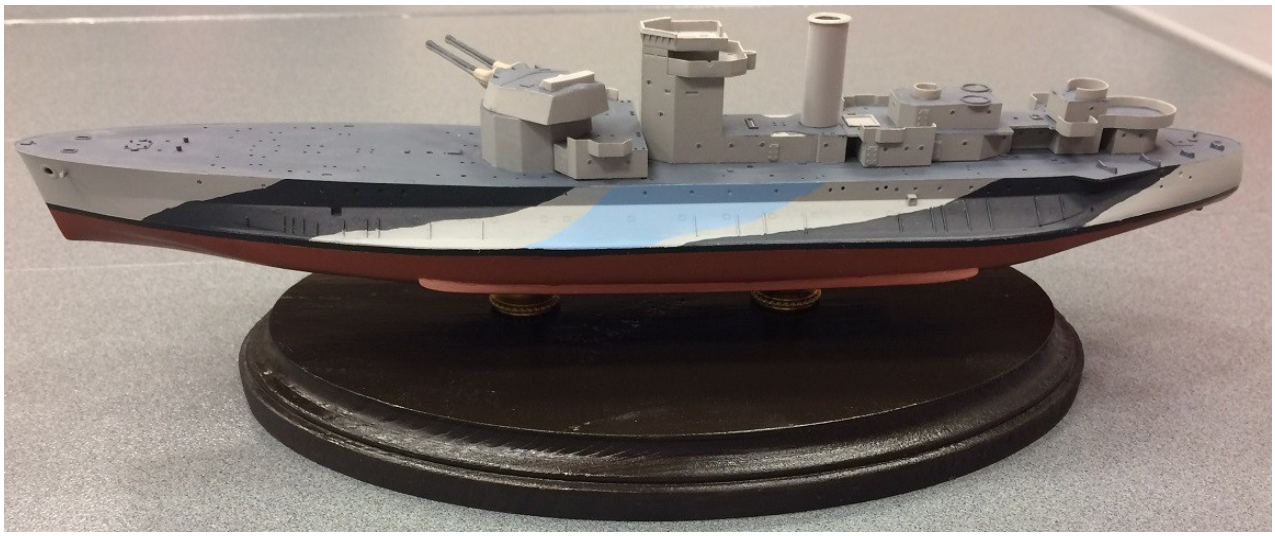


Jim Hamilton - Walthers/Cornerstone - 1/87/HOO scale Gravel Mill.

Donnie Greenway - Monogram - 1/24 scale Fast Buck.

Kevin Cook - Fantasy Flight Minis - 20mm scale Star Wars minitures.

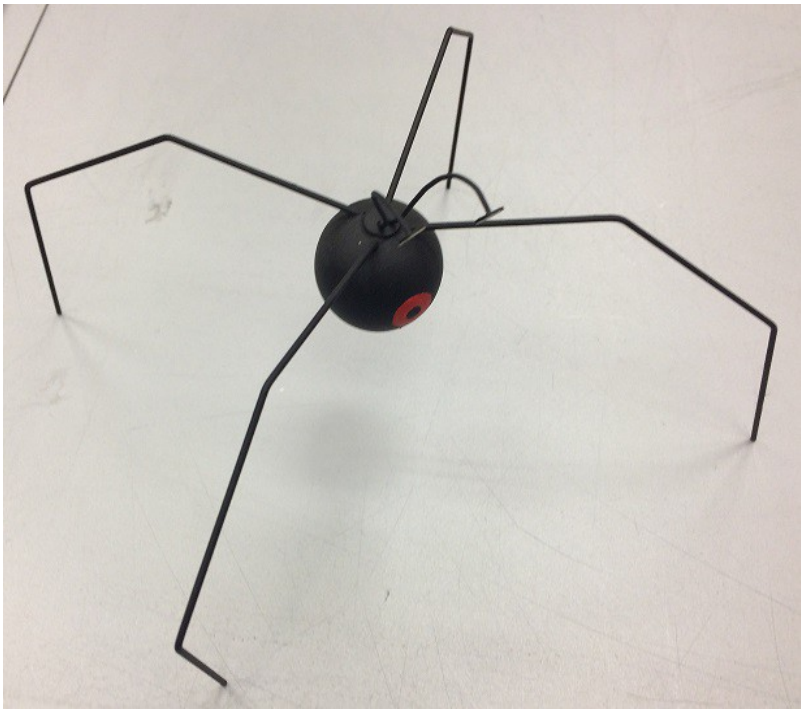




John Currie - Trumpeter - 1/350 scale HMS Roberts 1944. (WIP)

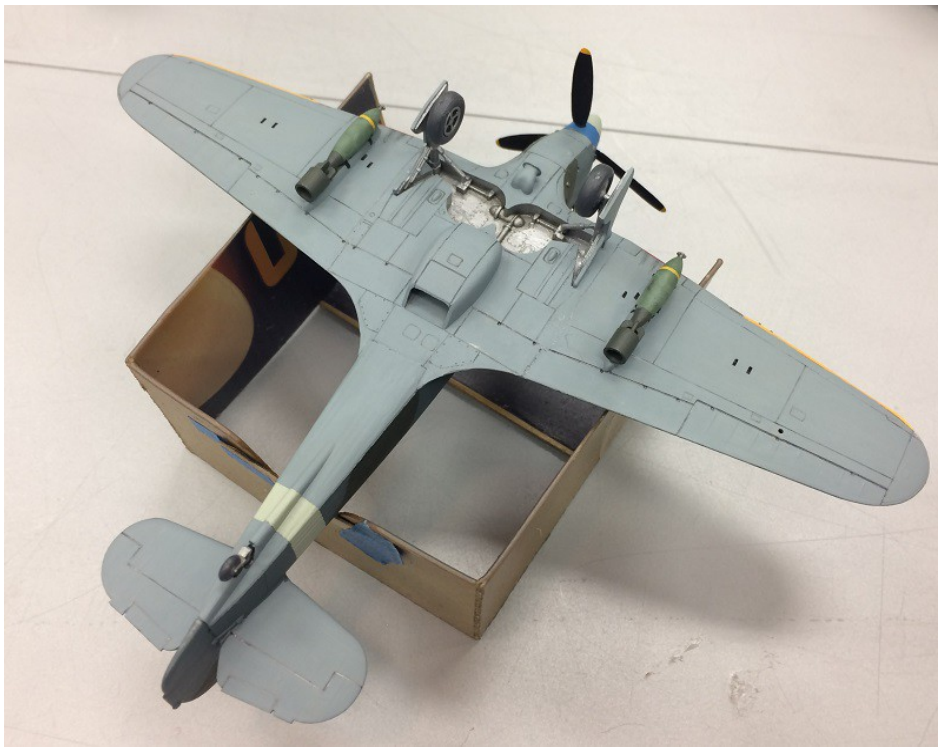
Tom Wingate - Dragon - 1/35 scale JagdPanther and crew. (WIP)

Darby Erd - Cape Hatteras Lighthouse.



Darby Erd - Scratchbuilt - Johnny Quest Robot Spy.

Darby Erd - Kenilworth Press - The Globe Theater.



Darby Erd - Revell - 1/72 scale Hurricane Mk.IIb (WIP)

Hub Plott - William Bros - 1/48 scale Ford Flivver.

Hub Plott - Airfix - 1/48 scale Supermarine Walrus.

Thats All For Now Folks, Hopefully see you at the next Meeting.

John.