

Building U.S.S. Truxtun (CGN-35)



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Introduction

For my second post-retirement model project, I decided to build U.S.S. Truxtun in 1/350 scale.

Truxtun is near and dear to my heart as I served in her from September 1979 to October 1982. I am building this model for a former Truxtun shipmate who made Captain in the Naval Reserve.

The only Truxtun model on the market is the 1/350 scale resin kit from Commander Models, Incorporated's Iron Shipwrights line. As one review of the kit said, "this is not a weekend project."

Initial Preparation

Resin is a harder to work with than a plastic kit. There are mold plugs on virtually all the pieces due to the casting process and one typically must deal with gaps/bubbles and warped parts. On the other hand, there are extensive Photo-etched brass detail parts. The scale will also allow me to customize the model somewhat.



Figure 1. The cast resin hull.

I tackled the mold plugs on the hull in two ways. First, I used a flexi-sander on small areas such as the SONAR dome; this allowed for a great deal of control. Second, I used a mini-belt sander

to get rid of the larger plugs and flash on the hull bottom. These areas were then wet sanded smooth with the flexi-sander.

Mounting and display is straight forward. I have a nice piece of oak for the base and brass finials. A 3/8-inch wood dowel will go through the oak and the finials into the hull. For a working mount, I'm using the wood dowels and a piece of left-over maple. I won't get worried about paint and glue on the working mount. When the model is complete, it will be put into a display case.

After the mold plugs were removed, I started filling in some of the "bubbles" in hull and removing casting residue. The holes are filled using Tamiya model paste and then sanded smooth.

The propeller shafts provided with the kit are cast resin and are warped and the starboard shaft aft V-strut is missing a leg. Instead of using the resin propeller shaft/strut assemblies and the resin propellers, I intend to use brass five bladed screws and brass rod for the propeller shafts. The trick will be to carefully cut the resin shafts from the struts and then very carefully drill out the struts to accommodate the brass rod.



Figure 2. The port shaft as provided in the kit after initial cleanup.

Unfortunately, the port shaft's aft V-strut started to crumble when I started drilling it out. I anticipated that this might happen and will build both aft V-struts from an Evergreen plastic rod and sheet plastic. The forward V-struts were scavenged from another kit.



Figure 3. The custom-built port shaft with screw.



Figure 4. Propeller shafts and rudders installed.

After adjusting the length of the V-struts, the shafts and struts were installed. The screws won't be glued on until after the hull is painted. The rudders merely required some clean up before they were glued in place.

I also had to make the port and starboard bilge keels. They were simple to do. I used a thin Evergreen strip and rounded the forward and aft ends. The keels were then super glued into position.

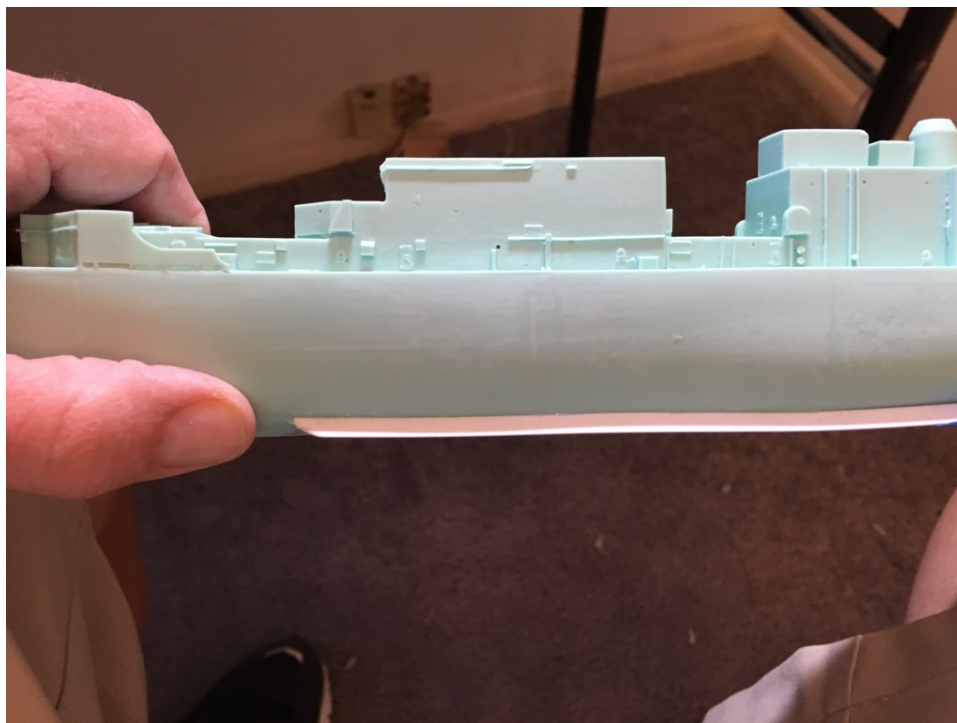


Figure 5. Port bilge keel.

The Tom's Model Works photo-etched brass watertight doors and hatches add a nice touch and will provide nice detail to the completed model. The door and door frames are about .20 inches tall. It took a lot of concentration to glue them in position.

The deck hatches, while smaller, were easier to do since they don't consist of two parts and are glued down in the horizontal plane.

The deck vents (for the emergency diesel generators) and the anchor windlasses and brake had voids in them. Instead of filling the voids with putty and then sanding them smooth and round, I used a micro punch set to create small and thin brass disks which I glued on top of the structures.



Figure 6. Photo-etched brass water tight door.



Figure 7. Photo-etched brass hatches and escape scuttle.

A general note: this kit has less detail and more poorly cast parts than I've seen with other resin kits. To quote Dad, "I'm fighting the kit" more than I like doing. Many of the detail parts are badly pitted, warped, have lots of flash, incompletely casted, or a combination of all four.

The kit manufacturer is good about replacing parts, but I've decided to go for more detail by using 3rd party add-on parts. Third party parts are generally more detailed and are of very high quality. The parts are 3D printed plastic, resin, and photo-etched brass.

These detail parts include:

- One 5-54 Mark 42 gun mount (3D printed plastic)
- Mark 10 standard missile launcher with SM-2ER missiles (3D printed plastic)
- Two AN/SPG-55B missile fire control radars (3D printed plastic)
- One Mk 68 Gun Director with AN/SGP-53 radar (resin with photo-etched brass)
- SH-2F Sea Sprite helicopter (resin with photo-etched brass)
- Life raft canisters (3D printed plastic)
- SLQ-32V3 electronic warfare system antennae (resin)
- SRBOC chaff launchers (none were included in the kit) (resin)
- Two quad Harpoon anti-ship cruise missile launchers (resin)
- Three ship's boats: Whale boat, officer's launch, and captain's gig (resin with photo-etched brass)
- Vulcan Phalanx point defense guns (resin)
- SPS-48 and SPS-10 radars (resin with photo-etched brass)
- Triple and double bitts (resin)
- Anchor chain (steel)
- Ship's anchors (3D printed plastic)

Using 3rd party parts has a small downside in that the model and part often must be modified to fit right. Careful planning is required.

I installed the O2 deck, the bridge structure, and the upper forward superstructure since they don't require detail work and additional parts. The gaps were filled with medium thickness super glue and white glue.

Gap filling remains my weakest technique. I realize that I need to make sure the joints between parts are true to the best of my ability. If, for example, the bridge part and upper superstructure part aren't level with forward super structure, a gap is created and that gap is hard to fill. Warped parts also create gaps. Poorly cast small parts create their own problems that are difficult to fix.

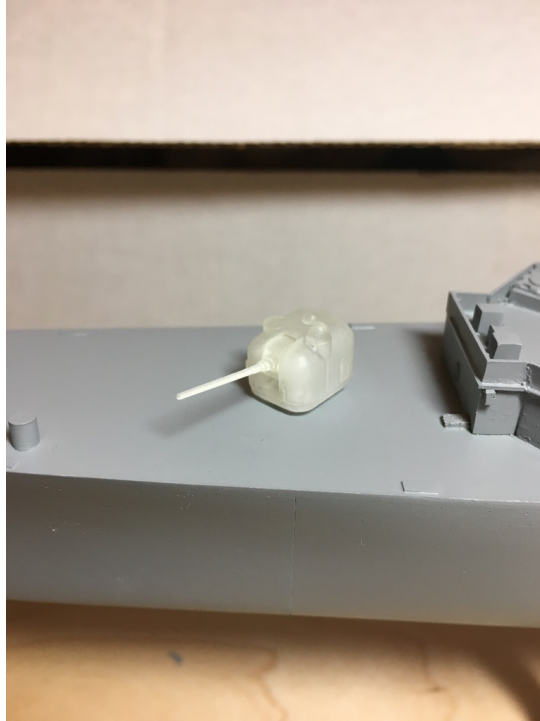


Figure 8. The 5"-54 Mk 42 Gun Mount; an example of a 3D printed part.

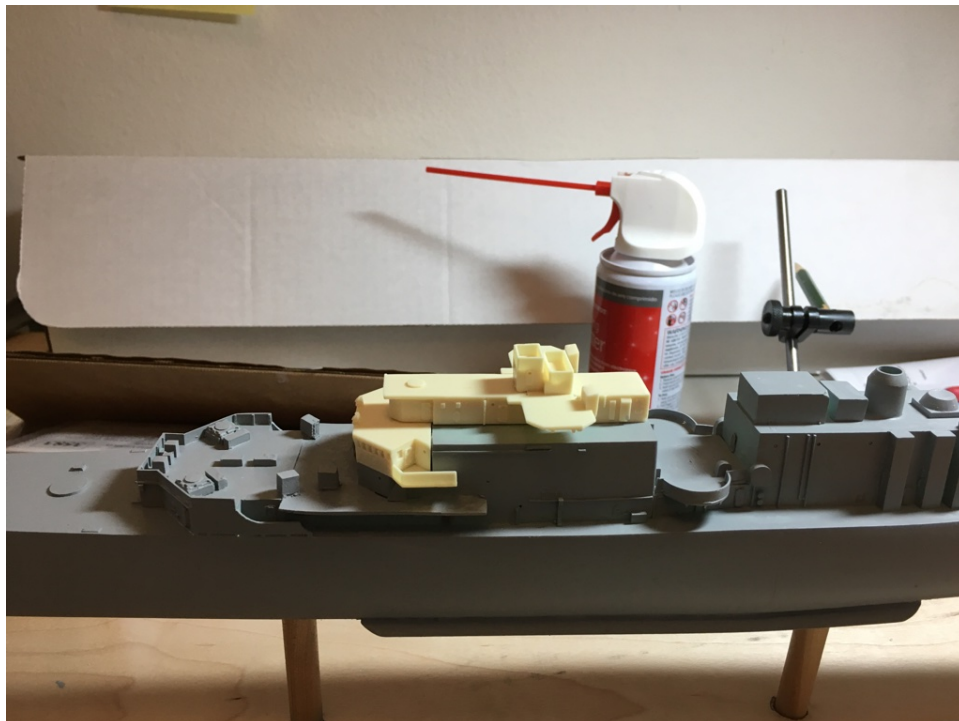


Figure 9. Dry fit of the bridge and forward upper superstructure.

Hull Painting

The plan is to airbrush the hull red, haze gray, and black boot topping, in that order. The deck gray will be done last.

I'm using Testor's Model Master acrylic for the haze and deck gray. The lower hull will be painted with Tamiya's acrylic hull red and flat black for the boot topping.

The most important thing in painting the lower hull is to get the water line properly marked around the entire hull.

I experienced a little gray paint confusion and painted some of the detail parts in dark gray instead of haze gray. Not a huge issue, but I don't want to do it again. I made "paint chips" on a sheet of evergreen plastic marked with the manufacturer and color. This will allow me to cross check the color before I start the job.

I sprayed the lower hull with Tamiya hull red mixed 2:1 (paint to thinner) at 40 psi using a fine nozzle. The paint went on beautifully with no runs. My airbrush technique is much improved since the motor torpedo boat project. I need to make a slight adjustment at the bow.

After letting the hull red paint to cure for about 24 hours, I masked the lower hull and sprayed the upper hull, and super structure with Model Master haze gray. Model Master acrylics are pre-thinned for airbrushing, so I only added a few drops of thinner. Spraying was done at 40 psi with a fine nozzle.

Airbrushing is 90% preparation and 10% execution. Case in point, the boot topping. I ran a 1/8-inch-wide strip of masking tape at the hull red/haze gray line. I then applied painters' tape above and below the 1/8 inch tape strip. Finally, I took the tape strip off; this left me with a strip of consistent width along the entire hull. The actual airbrushing was done with Tamiya flat black acrylic thinned 2:1 at 40 psi and using a fine nozzle. As expected, I had some touch up to do, but it was easy to take care of.

A painting tip from the past for a future model: Paint the boot topping first and let the paint cure. Mask the boot topping with thin masking tape and spray with clear acrylic. This seals the tape edges. Allow the clear coat to cure and paint the rest of the hull. This approach should make for a very nice and clean edge between the hull red and the haze gray with the boot topping. After I was done with the Truxtun's boot topping and touch up, I remembered this tip from building Scientific Model's U.S.S. Kearsarge in the late 1970's.

Over spray and paint runs are one of the banes of my existence—almost as much as gaps. To try to minimize them, I have masked the heck out of the deck edges and will be very careful with the deck gray.

I can only paint the deck gray for a few minutes-my hands get shaky. I had some touch up work, but overall, it came out okay, but not great. I'm thinking I should've bit the bullet and airbrushed it.

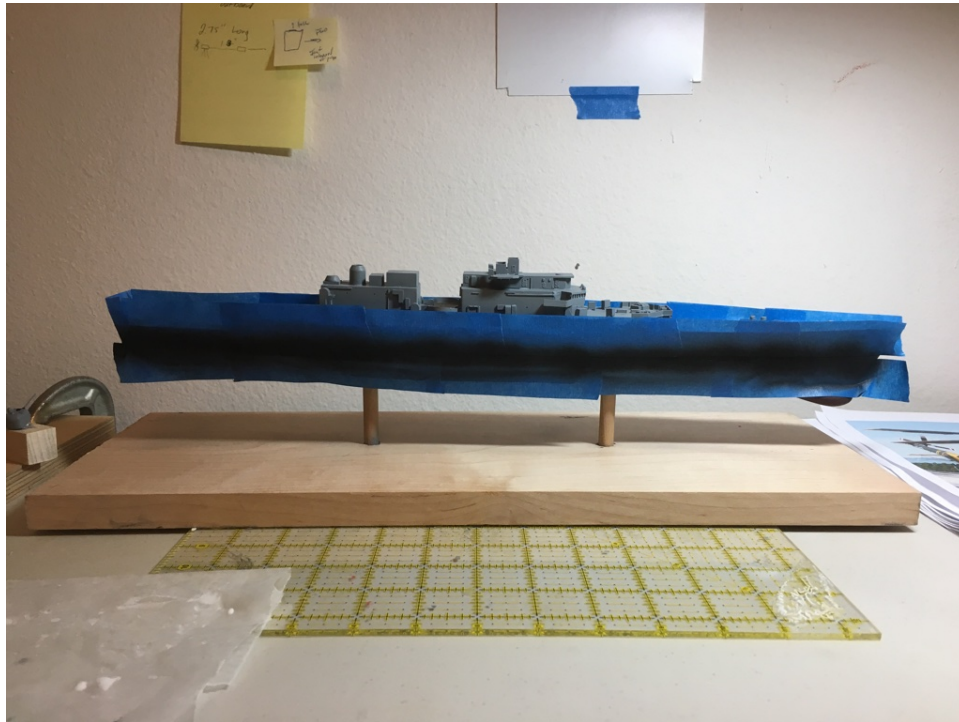


Figure 10. All the masking done for the boot topping.

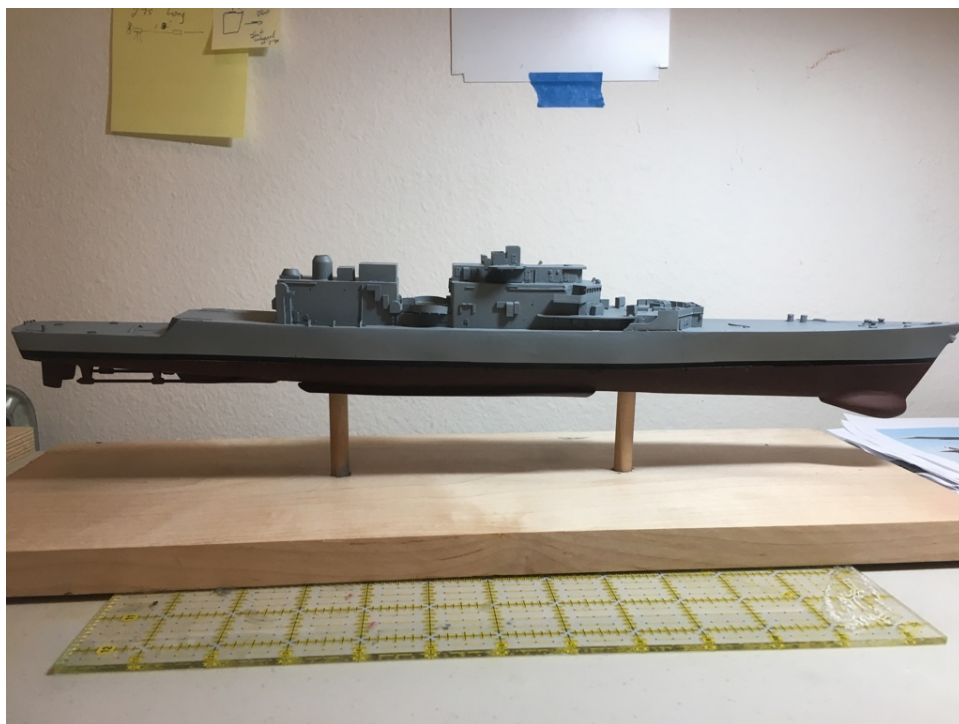


Figure 11. Hull with black boot topping; starting to look like a ship.



Figure 12. Masking frenzy to manage deck gray paint.



Figure 13. The deck gray looks okay.

The presentation stand is red oak. I gave it a light stain and about five coats of gloss urethane.

I painted details such as fire hoses and ready service lockers and applied the hull decals. I used a black fine point Sharpie to put some color and depth into the bridge windows. I used the

same technique to add some depth to the various air intake grills. I need to get as much of that done as I can before I start building out all the details—which can get in the way and create more items to break if you try to add the color afterwards.

Helicopter Build

Truxtun was configured to support an SH-2F Sea Sprite ASW helicopter. I decided to build it during the hull painting exercise as a side project. Unexpectedly, it turned into a mini project all on its own.

Sea Sprites were painted either gloss Navy Blue or sea gull gray, depending on the era. Not being sure which one was correct, I consulted with a friend and Sea Sprite expert, Tom Lee. Tom was a Naval Aviator and SH-2 squadron XO. He said that Sea Sprites of the Truxtun era were Navy Blue, so that issue is resolved.

The Sea Sprite wheels were a challenge. The parts are quite small and difficult to install. I used my needle nose tweezers, but the parts popped out and disappeared. Very disappointing. I had much better success installing replacement parts with the more broad tipped tweezers Barbara gave me.

An actual Mark 46 war shot is aluminum and brass in color with a black sonar transducer window and a black and yellow band around the PBX warhead. The screws are red and the parachute pack is white and orange. I won't get quite that detailed, but the torpedo adds a nice touch to the chopper.

Building out the helicopter has shown me my limits—I don't think I can handle anything smaller. The propellers on the torpedo are about 0.5 mm in diameter; I could barely see them.



Figure 14. The Sea Sprite helicopter.

Decals

While the model came with extensive decals there are some details I want to add.

I made two sets of custom decals using inkjet printer decal paper. I created a graphic of Truxtun's medal board, the Cruiser Destroyer Group One shield, ship's name for the stern (spelled properly; the provided decal is spelled "TRUXTON"), and the red and yellow warning stripe for the bottom of the hanger door. I also made the square yellow and blue UNREP marker for the amidships JP-5 refueling station.

Anything with white in it, such as the CDG1 shield, must be printed on white decal paper since Inkjet printers don't print white. The other graphics were printed on clear decal paper. After printing, the decals were sprayed with an acrylic clear coat, so they don't dissolve when the decal is put in water for application.

The decals provided in the kit are of high quality. I was a too aggressive with the danger circle for the MK 10 missile launcher, but I repaired it.

I added the "Battle E" for overall combat excellence and a "Green E" for CIC excellence to each bridge wing. The engineering excellence "Red E" is on the forward top deckhouse on the aft superstructure.

I'm using Testor's decal setting solution, which comes in two strengths. I used the general setting solution to get the decals in the right position. Basically, you float the decal on general

setting solution until it is where you want it. I let the decals dry overnight. After they were dry, each decal was brushed with several coats of complex surface setting solution to ensure each one closely conformed to the ship.

The hull decals really look good.

Fitting Out

In traditional shipbuilding, once the hull is complete, it is launched and then moved to a fitting out dock. The fitting out stage completes the ship prior to sea trials.

I declared the Truxtun to be in the fitting out stage once I put the model on the presentation stand. My friend, Len Kasang, assisted in getting the model properly mounted on the presentation stand. He is a woodworker with all the right skills and tools to make sure we drilled the holes in the right spots and vertical, so we get the best possible presentation.

While work is being done all over the model, the dialog is in sections, so the construction sequence isn't linear.



Figure 15. Note the addition of bitts for mooring lines.

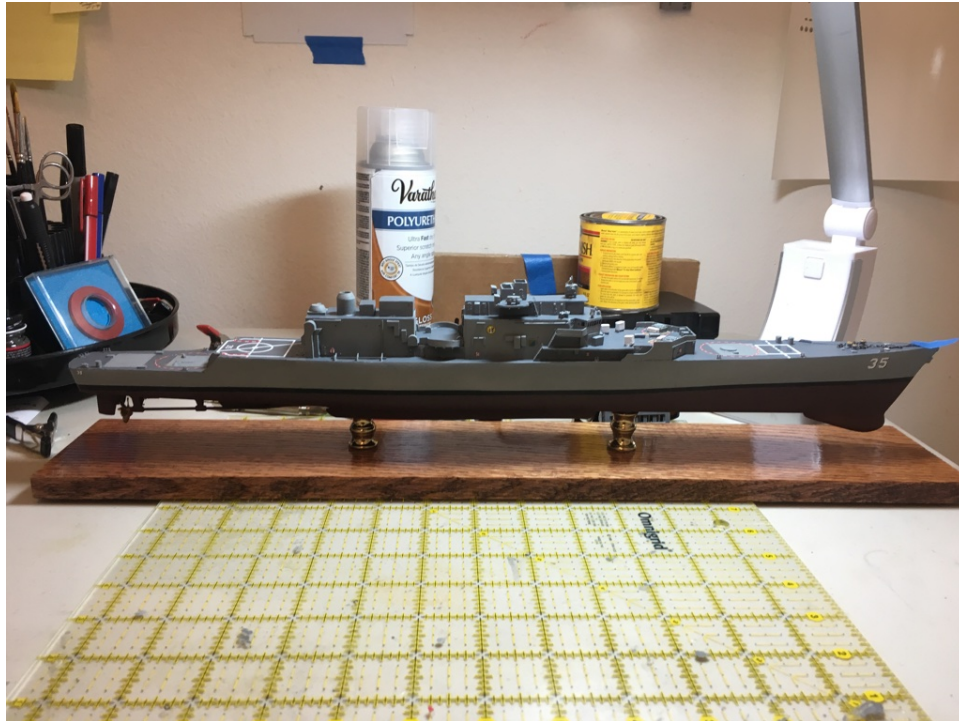


Figure 16. The model on its presentation stand.



Figure 17. The solid brass screws look good.

Forward Superstructure Fitting Out

I have been working on building and painting detail parts as I work on the hull and superstructure. It gave me a break from the tedium of masking tape!

I'm starting with the forward superstructure. My plan is to work top down. The detail parts were easy to install, and I noticed the plans had an error regarding the placement of the forward SATCOM antenna. I installed it in its correct position.

The SRBOC launchers were installed above the bridge.

The ladders were an easy bend of the photo-etched brass pieces. Each ladder is about 3/8th of an inch in length and were painted prior to installation. The paint was touched up afterwards.

Looking ahead, I drilled three small holes in each flag bag so I can rig halyards for signal flags. I plan on flying BRAVO ZULU from the port yardarm. I painted the top of the flag bags gloss blue to simulate their canvas covers.

I realized I was getting ahead of myself, so I took the time to clean, prime and paint all the photo-etched brass parts. After the brass frets were airbrushed with haze gray, I let them cure overnight.

The next day, I airbrushed the brass frets, the ship, the helicopter, and all the already constructed and painted components such as the gun mount, gun director, missile launchers, fire control radars, etc. with semi-gloss clear acrylic. I used Model Master's clear acrylic. It only needs a couple of drops of thinner and it sprays well at 40 psi.

I am pleased with the outcome. The model has the right "painted" metal sheen which comes from using oil-based paint.

I customized the grounding tackle (the anchors and chain) by adding scale anchor chain. I think it adds a nice touch. I was finally able to add some weaponry to the model, a morale boost for sure.

The big challenge during fitting out has been the life rails. They are very thin and fragile photo-etched brass and are difficult to install. An internet search found a video with tool and technique suggestions that I found useful. There is no real short cut, but the best method is to put a small dab of very thick super glue on the bottom corners while holding the railing with tweezers from the top. I then put the piece in place and hold it with one hand and use a pin to gently push it into position. Once the glue has set, I run a bead of thin super glue along the bottom. Capillary action causes the glue to flow under the railing; this improves the bond.

The upper forward superstructure reveals my struggles with the railings, but I started doing better as I went along. I can only install them in small increments; I get the shakes. Coffee is

also not recommended, so much of the work has been done either in the late morning or in the afternoon.

I added the forward whip antennae which were cut from a brass rod. It is a relief to do something other than life rails.

I also added the port and starboard .50 caliber machine guns to the aft part of the forward superstructure. I supervised their installation when I was the Gunnery Officer.

Bow Fitting Out

After completing the forward superstructure detail work, it is on the bow. The bow work, some of which I've already done, includes the bow spike antenna, UNREP kingposts and life rails.

The kingposts required a little carving on the superstructure to ensure a proper fit, but it was a simple task.

I have to be real careful around the spike antenna once it was installed; it is very fragile.



Figure 18. The Spike antenna looks cool.

Once the foremast was installed, the life rails were glued in place. The only challenge with the life rails was the curved piece for the bullnose. I had very little problems with these life rails—practice, practice and more practice finally paid off.



Figure 19. The bow life rails look good!

Foremast Build

A lot of photo-etch brass work here! The SPS-48 provided with the kit had some bad resin parts, so I'm using a 3rd party add-on kit. The add-on kit also has a SPS-10/SPS-67 radar antenna, so I used it too.

The foremast is no place for shaky hands, so my work time is limited. I discovered much of the shakes was due to caffeine. Changing to a 50/50 mix of caff/decaff has helped. Gone are the days of coffee in the morning and coffee after lunch. Three cups of caff/decaff in the morning is now my limit.

The foremast platform needed to be modified by removing the mounting pedestals to accept the 3rd party antennas. The platform was warped so I straightened it by softening it in hot water and then bending it to the right shape. The part was then dunked in ice water to help it retain its new shape.

The mast itself is two pieces of photo-etched brass. The larger piece consists of the three sides of the mast with the other piece being the fourth side. I used my large bending jig and a metal ruler to bend the three-sided piece into shape. The fourth side was then glued in place.

The instructions aren't very clear as to what each photo-etched piece is labeled, nor are most of the photo-etched sprues labeled. In addition, there are parts on the sprues that don't show up in the plans.

I added a yardarm for the signal flags which was cut from a brass rod and used some "unknown" photo-etched parts as the yardarm braces.

While the plans didn't show it, the foremast had a platform on the back of it for the third WLR-1G ESM suite antenna. The kit had a platform on one of the photo-etched brass sprues and I made the antenna out of a piece of plastic rod.

I added the stick antenna to the platform and made the braces out of brass rod. I had to do some trigonometry to ensure they were the right length. Math rears its head in strange places.

Once the foremast was assembled, but before the radars were installed, it was off to paint. The foremast and radars were airbrushed with Testor's Model Master haze gray at 40 psi. The platform horizontal surfaces were brush-painted with deck gray. After the paint had cured, the radars were installed and the whole structure was sprayed with clear semi-gloss.

The reactor compartment vents were glued in place and then the mast.

Signal flag halyards were added from the lower yardarm to the port and starboard flag bags and an additional halyard was added for the Commissioning Pennant. The halyards were made from very thin white lycra thread. I managed to clobber two small sections of life rails during the installation, but they were repairable.

I attempted to make the commissioning pennant from a small American flag decal, but my first attempt ended in failure; it came apart as I struggled to get in on the halyard.

I also had trouble with the signal flag decals provided with the kit. The flags look too big for the scale, but that's what I we must work with. The plan is to fly "BRAVO" ZULU" from the outboard port halyard. As I tried to add "BRAVO" to the halyard, it came apart in my hands. Either the lycra halyards are cutting them like a knife, or the decals are old and brittle.

I went ahead and made my own decals for the commissioning pennant, BRAVO flag and ZULU flag, but the signal flags are still too big. The commissioning pennant is okay, but once again, I had difficulty installing it and it droops.



Figure 20. The foremast as built.

I've learned that the rigging thread is very stretchy, so I used a different approach. I added the commissioning pennant to a length of thread before the thread is installed on the ship. This way, it was easier to work with on the work bench and I stretched the halyard taunt during installation.

I found an after-market set of signal flags which are the right size for the scale and made of photo-etch brass. I used the same commissioning pennant approach with the signal flags.

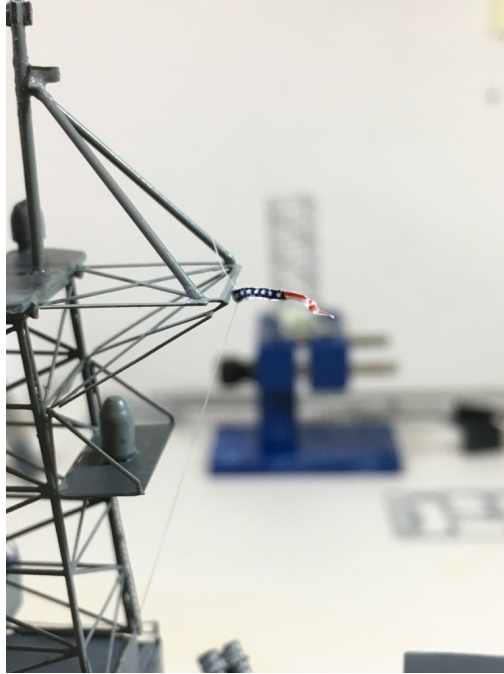


Figure 21. The Commissioning Pennant.

Mainmast Build

The mainmast platform was badly warped, but I was able to bend it into the proper shape using the hot/cold water technique. I managed to break off one side of the yardarm by being too aggressive with the part, but I was able to glue it back on.

After breaking the yardarm again, I replaced it with a brass rod. It looks better.

The photo-etched brass mast structure was three 90-degree bends with the fourth side glued on afterwards. The platform was then glued in place. My initial fit check indicates a bad fit on the superstructure—the mast base is bigger than the superstructure area. This may be tricky.

The SPS-40 radar's feed horn was the most complicated photo-etched brass work I've done to date. It had eight bends.

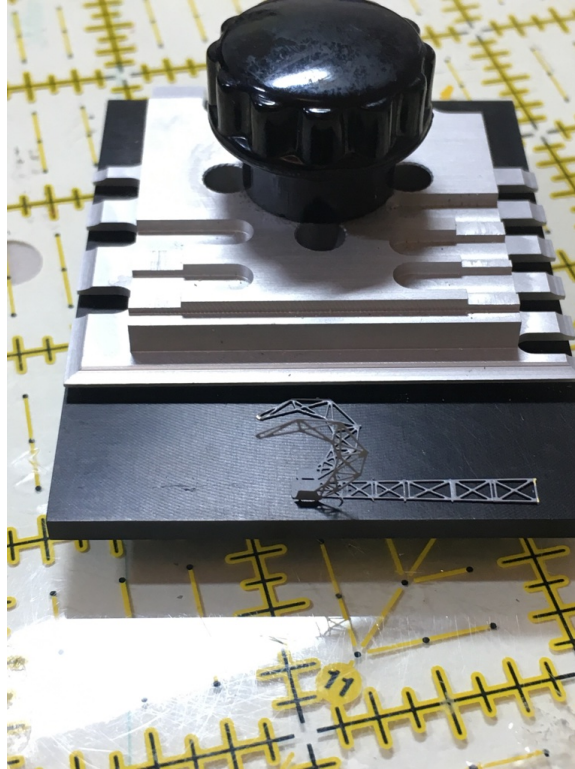


Figure 22. SPS-40 feed horn after the first bend.

After bending the two sides into the vertical, I slowly bent the back piece into position. After getting all but the last section in place, I made a mistake. I had the second to last section in the right place and I super glued it to the side pieces. However, I let some of the glue seep onto the work surface and I glued the entire assembly to the work surface. I ended up cutting the piece off the work surface but damaged some of the assembly. After repairs, it looks acceptable.

The antenna consists of two parts that I bent around a paint bottle to get the proper curve. The antenna parts were glued together and then glued to the feed horn. I had to do a little bit of modification to the antenna to get it to fit, but it looks good.

I added the additional photo-etched brass antennas to the TACAN mast without trouble. I need to make the bracing for the TACAN mast, like what I did for the stick antenna on the foremast. However, I tried a more refined technique that should yield a better-looking result and will help with future projects. I soldered the brass rods together and then glued the resulting brace to the TACAN mast and the main mast platform. This was trickier than it appears, but it ended up working well. It also gave me some practice in scratch-building parts.

The TACAN antenna, bracing and SPS-40 were installed on the platform, and a small brass rod was added as the “pig stick” for the national ensign.

The main mast is now ready for painting. After building the foremast, I found it easier to install the radars first and then paint the entire structure.

The mast was sprayed with primer and allowed to cure overnight.

The main mast assembly was airbrushed with Testor's Model Master haze gray at 40 psi. The platform horizontal surfaces were brush-painted with deck gray. After the paint had cured, the whole structure was sprayed with clear semi-gloss.

Once the clear coat had cured, I installed the main mast. Because of the size mismatch, I added a thin strip of plastic to the back of the deckhouse to provide additional support the mast and painted it haze gray. I filled the gaps between the mast and the deckhouse with medium thickness super glue.



Figure 23. Main mast as built.

The main mast has a single halyard on the aft side for the national ensign. I used the same flag installation technique that I perfected for the foremast. No problems!

Ships Boats and Midships Fitting Out

Truxtun carried four ship's boats: captain's gig, officer's launch, 40-foot crew boat and a 26-foot motor whale boat. The kit, for some reason, didn't include a whale boat and the launches appear to be out of scale (too big), so I'm using a 3rd party add-on kit. The add-on kit includes the whale boat, officer's launch, and captain's gig with photo-etched brass details. I'm using the 40-foot crew boat which came with the kit despite its bad condition; it was poorly cast. After the helicopter build, I think I'm ready for the challenge.

I lost one of the handrails to the officer's launch when it popped out of my tweezers. After a thorough search, I found it.

Before installing the davits, I added photo-etched brass ladders to the aft superstructure which represent the ladders the crew used to access the boats when stowed.

The starboard side boats, the officer's launch and 40-foot crew boat, were stacked together. I created a stacking cradle from a spare photo-etched brass piece. The crew boat doesn't fit quite right, but there was nothing I could do about it.

Of note, the captain's gig was originally assigned to the U.S.S. Oklahoma City (CG-5) and was a fancier model than originally assigned to Truxtun. Oklahoma City had been the flagship of 7th Fleet and was in the process of decommissioning when I arrived onboard the Truxtun. Our First Lieutenant swapped our captain's gig for the Oklahoma City's. The wood deck was lovely!

To simulate the wood deck, I painted the deck of the captain's gig with "mahogany" acrylic.

I installed the port-side davits according to the instructions, but this was a mistake since I'm using 3rd party parts for the boats. I carefully removed one of the davits from each set and re-installed them. Hopefully, the patched paint won't be too noticeable. I didn't get it quite right, but it looks okay.

The ship was also equipped with inflatable lifeboats in canisters that were located along the forward superstructure. The canisters are mounted in pairs on a photo-etched brass rack.

The instructions were not clear as to what photo-etched brass part to use and the specific location. I made some assumptions, and the results are okay, but a little sloppy by my standards. I think I was in a rush to do them. Someday I will build a satisfactory model—that will probably occur when I break 90 in golf!

Once the main mast was installed, I added the life rails to the midships area.

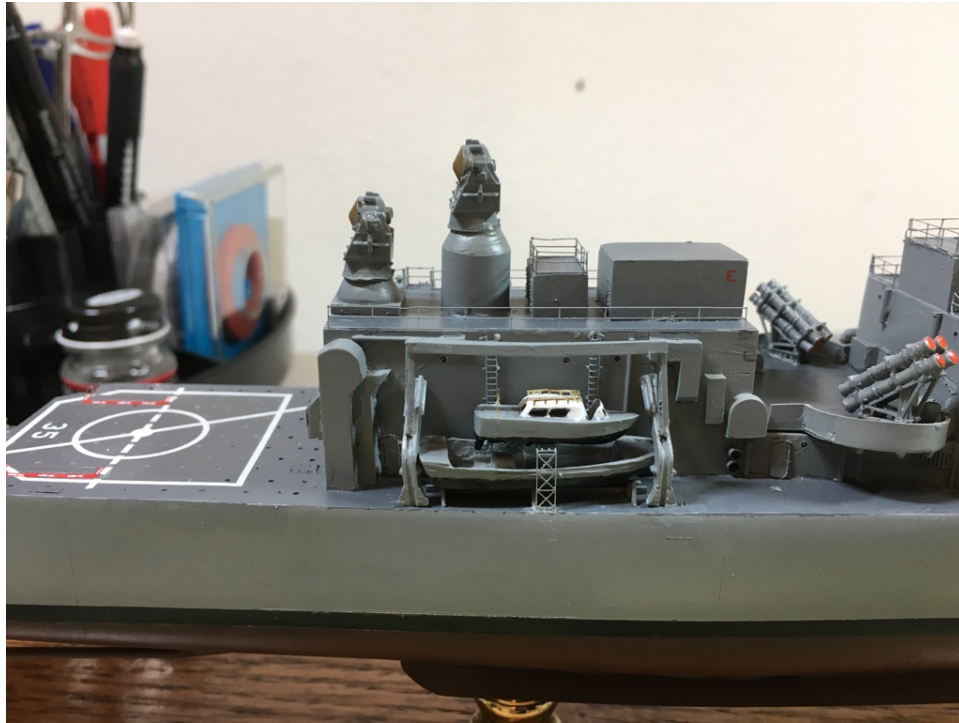


Figure 24. Starboard-side boats

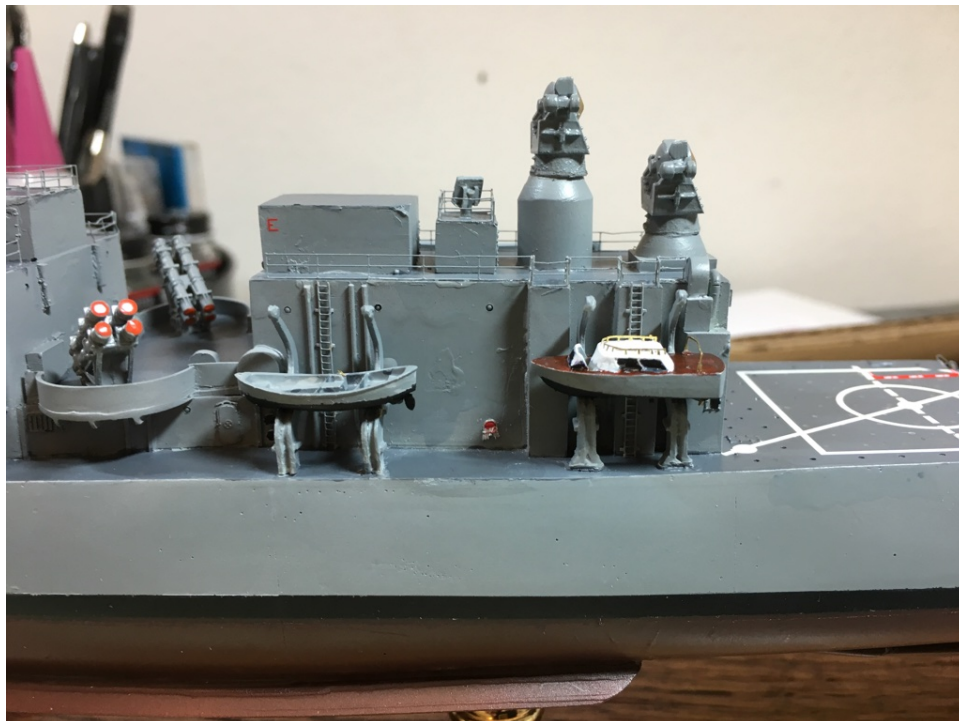


Figure 25. Port-side boats.

Stern Fitting Out

The stern fitting out tasks include installation of additional antennas, flight deck safety nets, and life rails, including the life rails on the aft superstructure.

The life rail installation on the aft superstructure went much better than the forward superstructure—practice, practice.

The model is missing the two Classic Outboard antennas on the edge of the flight deck. I made them out of brass and plastic rod stock. They are in the down position, ready for flight operations.

I thought about making the 24-deck edge Classic Outboard antennas out of sheet styrene plastic, but I couldn't find a picture of them, nor where they were installed. The two Classic Outboard antennas on the stern were made from plastic rod stock.

After the main mast was installed, I could turn to the remaining details.

The flight deck safety nets were installed in the down—ready for flight operations—position and then the Sea Sprite helicopter was carefully glued into position.

I added propeller guards which were scavenged from another kit.

Life rails were installed without a hassle. The curved parts for the stern were created by rolling a wooden dowel over the life rails on a soft cutting matt.

The stern is done!



Figure 26. Starboard propeller guard before paint.

Display

The case was custom built by JD Model Shop in San Pedro, California. The name plate came from our local trophy shop. The ship's motto translates as "Seamanship, Loyalty and Command."

I put three small dabs of super glue on the base to keep the model and display case base attached.

The model is now complete in all respects and is ready for deployment to Jim's home.

Jim originally planned to put the model in his office, near his other Navy memorabilia, but Patti Lu insisted it go in the family room so it can be seen. Very nice!



Figure 27. Truxtun As Built.



Figure 28. Truxtun As Built



Figure 29. Model in its Display Case.



Figure 30. On display in the Gentile household.

Summary

The Truxtun was the most complex model I have ever built; it was definitely not a weekend project. I certainly enjoyed bringing the Tommy T back to life!

I learned many new techniques that will most certainly improve the next warship model I build. My airbrush technique has improved significantly. I'm still weak on "gap" management.

For the next resin kit, I now know I will need to spend more time in preparing each individual resin piece. Some of the mold marks are hard to remove or fill.

I am much more confident in handling photo-etched brass parts and the decals as installed on the model are the best I've ever done.

I estimate that I've spent about 300 hours on research, construction and documentation on Truxtun between February 8, 2018 and August 14, 2018.

I'm going to give myself a break before the next project!

Ship Characteristics

Built By: New York Ship Building, Camden, NJ

Laid Down: 17 June 1963

Launched: 19 December 1964

Commissioned: 27 May 1967

Displacement: 9,127 tons at full load

Length: 564 feet

Beam: 58 feet

Draft: 30.5 feet

Speed: 30+ knots

Machinery: 2 General Electric D2G pressurized-water reactors, 2 sets of geared turbines, 2 propellers, 70,000 shaft horsepower

Electrical: 14,500 KW

Manning: 36 officers and 463 enlisted men, with an additional Flag accommodations for six officers and 12 enlisted men.

Electronics (in 1990's configuration)

- 1 SPS-48C 3D air search radar
- 1 SPS-40D 2D air search radar
- 1 SPS-67 (digital SPS-10) surface search radar
- 1 LN-66 surface search radar
- 1 SPG-53F gunnery fire control radar
- 2 SPG-55C missile fire control radars
- Electronic warfare suite: WLR-1G ESM Suite, SLQ-32(V)3 ESM/ECM suite, SSQ-108V Classic Outboard tactical radio direction finding system, Mk 36 SRBOC
- SQS-26AXR sonar
- URN-25 TACAN
- SLQ-25 Nixie torpedo decoys
- WSC-3 SATCOMM
- NTDS data system

Weapons

- 8 Harpoon anti-ship cruise missiles in two Mk-141 quad cannister launchers
- 1 Mk-10 missile launcher for 40 Standard Missile 2ER and 20 ASROC
- 1 5 inch/54 Caliber Mk 42 dual purpose gun mount
- 2 20mm Vulcan Phalanx Close In Weapon System (CIWS)
- 4 12.5 inch Mk 32 torpedo tubes for Mk-46 anti-submarine torpedoes
- 1 SH-2F Sea Sprite Light Airborne Multipurpose System (LAMPS) Mk 1 ASW helicopter

Weapons Control

- Mk-76 Mod 6 missile fire control system
- Mk 68 gun fire control system
- Mk-14 weapon direction system
- MK-114 ASW fire-control system

History

USS Truxtun was a nuclear powered single-ended guided missile cruiser based on a heavily modified version of the Belknap class cruiser. She was the only ship of her class and was the third nuclear cruiser built by the U.S. Navy. Truxtun was originally commissioned as a DLGN (called a frigate), but was later re-classified as a CGN.

1960's

Truxtun exited Camden on 3 June 1967 and headed for the West Coast. En route, she visited Yorktown, Virginia and Norfolk, Virginia; Guantanamo Bay, Cuba; Rio de Janeiro, Brazil; and Mar de Plata, Argentina. *Truxtun* rounded Cape Horn on 10 July and entered the Pacific Ocean. After port calls at Valparaíso, Chile, and Mazatlán, Mexico, *Truxtun* reached Long Beach, California, her home port, on 29 July. After conducting trials there in late summer and early fall, she commenced shakedown training in November.

The nuclear-powered warship completed her shakedown training and, on 2 January 1968, got underway for the Western Pacific. She made an overnight stop at Pearl Harbor on 7/8 January and arrived in Sasebo, Japan, on 19 January. Five days later, *Truxtun* and the aircraft carrier U.S.S. *Enterprise* (CVN-65) departed Sasebo and headed for the Sea of Japan in response to North Korea's seizure of the U.S.S. *Pueblo* (AGER-2). She operated in the Sea of Japan until 16 February when she headed south for her first line period off the coast of Vietnam. After an overnight stop at Subic Bay on 19–20 February, *Truxtun* set a course for "Yankee Station" in the Gulf of Tonkin. *Truxtun* spent the majority of the remainder of her deployment in the Far East operating off the coast of Vietnam. While in the combat zone, she conducted search and rescue (SAR) missions, stood guard against North Vietnamese air attacks as a positive identification radar zone (PIRAZ) picket ship (call sign RED CROWN), and served as plane-guard ship for carriers *Enterprise*, *Bon Homme Richard*, and *Ticonderoga*. *Truxtun* punctuated her line periods with calls at Singapore, Hong Kong, Danang, and Subic Bay. She departed Subic Bay on 6 July, steamed east toward the United States, and reentered Long Beach on 19 July.

For the next four months, the warship operated along the U.S. West Coast. She acted as plane guard for *Ranger*, *Kitty Hawk*, *Enterprise* and *Yorktown* while those carriers conducted landing qualifications for pilots. In mid-November, *Truxtun* became an antisubmarine warfare (ASW) school ship, and she hosted student sailors learning the techniques of hunting submarines. Early in December, *Truxtun* returned to Long Beach to prepare for overhaul. In January 1969, she shifted to Bremerton, Washington, where she entered the Puget Sound Naval Shipyard for refurbishing which lasted until April. The cruiser then resumed operations along the West Coast which continued until 23 September when she got underway for her second deployment with the 7th Fleet.

After a stop at Pearl Harbor, *Truxtun* arrived at Subic Bay on 20 October 1969. Again, she spent much of her deployment cruising along the coast of embattled Vietnam, taking time periodically to make port calls at Hong Kong, Singapore, and Subic Bay. However, in addition to acting as plane guard for carriers and standing duty as PIRAZ and a search and rescue ship, she also served as a peacetime aerial reconnaissance protective (PAPRO) picket in the Sea of Japan

and participated in the Taiwan Strait patrol. Just before departing from the Far East, she conducted exercises in the vicinity of Okinawa and then made her final port visit at Sasebo, Japan, from 6 to 11 March 1970.

Truxtun was awarded the Navy Unit Commendation for superior performance during her deployment.

1970s

Truxtun returned to Long Beach on 23 March and launched into a round of inspections and training cruises. In June, the warship embarked 40 NROTC midshipmen for their summer training cruise. During the first part of the cruise, she fired missiles on the Pacific missile range and visited San Francisco and Seattle. On 13 July, she departed Seattle for Pearl Harbor to conduct the second part of the training cruise. On 29 July, *Truxtun* returned to Long Beach from Hawaii, disembarked the midshipmen, and resumed normal operations. For the remainder of the summer, she conducted exercises and underwent various inspections. From 16 to 25 October, she moored alongside *U.S.S. Samuel Gompers* (AD-37) for a tender availability. Following one more period of exercises at sea late in October, she entered the Long Beach Naval Shipyard in preparation for a three-month restricted availability which began on 2 November 1970.

Truxtun's yard work was completed in mid-January, she then conducted type training and ASW exercises before preparing to deploy to the western Pacific once more. She returned to Long Beach on 22 January 1971 and remained there until 2 February when she got underway for Pearl Harbor. After a two-day layover in Hawaii, she resumed her voyage to the Far East on 9 February and reached Subic Bay on 20 February. During that deployment, *Truxtun* returned to her familiar routine along the coast of Vietnam, standing PIRAZ picket duty and conducting exercises and tests. She visited Yokosuka, Japan, several times and made single stops at Hong Kong and Sattahip, Thailand. In late April, she also patrolled the Taiwan Strait for two days.

On 6 July, she completed her final line period of the deployment and left the Gulf of Tonkin. After a visit to Subic Bay, she set a course, on 10 July, for Fremantle, Australia, where she spent a week. Following port calls at Pago Pago, Samoa, and Pearl Harbor, she moored at Long Beach on 17 August and began post-deployment stand-down. Through the end of September, *Truxtun* received visitors on board and conducted drills to improve and to test her missile and gunnery marksmanship. During the first week in October, a Board of Inspection and Survey inspected *Truxtun*; and, on 8 October, she began a restricted availability during which she was modified to utilize the Light Airborne Multi-purpose System (LAMPS). From 18 November to 9 December, the ship conducted post-availability dock trials and type training as well as testing the newly installed LAMPS system. On 14 December 1971, a team from Naval Air Systems Command inspected and certified *Truxtun's* LAMPS installation.

During the first six months of 1972, *Truxtun* operated out of her home port in North American coastal waters. She conducted exercises, entertained visitors, and underwent several inspections. Following another restricted availability in June, she spent July preparing for her fourth tour of duty with the U.S. Seventh Fleet.

On 13 July, she departed Long Beach with HMNZS *Canterbury*, bound for the western Pacific and for her most eventful series of line periods off Vietnam. She parted company from *Canterbury* on 18 July and put into Pearl Harbor the following day. On 23 July, *Truxtun* resumed her voyage to the Orient and moored at Subic Bay on 4 August. Four days later, she loaded ammunition and got underway for her first line period in the Gulf of Tonkin. Over the next five months, *Truxtun* stood both SAR and PIRAZ picket duty. During these assignments, she evaded at least three typhoons. Her busiest week came between 8 and 15 October, when she directed fighter intercepts resulting in six MiG kills, three of which occurred on 15 October alone. By the end of her deployment, *Truxtun* was credited with directing fighter intercepts which resulted in the destruction of eleven North Vietnamese MiGs and rescue of three downed American pilots, earning the ship her second Navy Unit Commendation.

In October, November, and January, *Truxtun* briefly joined the Taiwan Strait patrol. She also made port calls at Sasebo, Singapore, Hong Kong, and Yokosuka. On 21 January 1973, U.S.S. *Reeves* (CG-26) relieved her on the north SAR station, and *Truxtun* headed, via the Taiwan Strait, for Japan. She stopped at Yokosuka from 26 to 30 January before continuing on, via Pearl Harbor, to Long Beach, where she arrived on Lincoln's Birthday.

Post-deployment stand-down took up the ensuing month. On 19 March, she moored alongside U.S.S. *Piedmont* (AD-17) and commenced a tender availability which lasted until late April. *Truxtun* then resumed operations in and out of Long Beach. In May, she conducted type training off the California coast and naval gunfire support qualifications at San Clemente Island. On 7 June, the warship began embarking Naval Academy and NROTC midshipmen for their summer cruise. For the next two months, she trained the midshipmen, carrying them to ports along the west coast as well as to Hawaii.

She debarked the midshipmen on 27 July and began preparations for her fifth deployment to the Far East. On 17 August, *Truxtun* got underway from Long Beach, bound for the western Pacific. En route, she stopped at Pearl Harbor and reached Subic Bay on 5 September. She punctuated relatively uneventful tours of duty on PIRAZ station in the Gulf of Tonkin with port visits to Sattahip, Singapore, and Manila. *Truxtun* also conducted missile exercises and ASW drills. On 9 December, she stood out of Subic Bay, sifted through the San Bernardino Strait, and headed for home. On Christmas Eve 1973, *Truxtun* moored at Long Beach and began preparations for her first complex overhaul.

On 25 January 1974, *Truxtun* cleared Long Beach for Bremerton, Washington. Four days later, she entered the Puget Sound Naval Shipyard. There, the warship began a major 18-month overhaul during which her nuclear reactors were "refueled." On 30 June 1975, near the end of that repair period, *Truxtun* was reclassified a nuclear-powered guided missile cruiser and was re-designated **CGN-35**. On 31 July, she completed the overhaul and all attendant tests and trials and sailed for San Diego. She arrived in her new home port on 4 August and resumed normal operations in the southern California area. That schedule occupied her for the following 12 months.

On 30 July 1976, the guided missile cruiser headed out of San Diego, bound for the western Pacific. After two weeks of training in the Hawaiian Islands, she continued her voyage west on 16 August; and, after a somewhat circuitous cruise that took her to Wellington in New Zealand

and Melbourne in Australia, *Truxtun* arrived in Subic Bay on 25 September. She conducted operations in the Philippines for about a month and then departed Subic Bay on 28 October, bound for the Indian Ocean and participation in Operation "Midlink 76." She arrived in Karachi, Pakistan, on 9 November for three days of briefings in preparation for the exercise. From 13 to 21 November, the warship joined in the multinational exercise in the waters off the coast of Pakistan. She returned to Karachi at the conclusion of "Midlink" on the 21st and remained there until the 24th at which time she headed back to Subic Bay. Local operations in the Philippines occupied the remainder of the year. From 4 to 13 January 1977, *Truxtun* made a round-trip voyage to Hong Kong and back. She completed READEX 1-77 between 15 and 21 January and then again headed for the Indian Ocean in company with *Enterprise* and the cruiser *Long Beach*. En route, she and her travelling companions conducted exercise "Merlion III" with units of the Singapore Armed Forces on 25 January. *Truxtun* participated in Operation "Houdini" in mid-February and visited Port Victoria in the Seychelle Islands. She returned to Subic Bay on 13 March and, four days later, got underway for the United States.

After an 11-day non-stop voyage, she reentered San Diego on 28 March. The guided missile cruiser conducted a four-week restricted availability and then resumed operations along the California coast. For six months, the warship conducted routine independent ship's exercises, gunnery drills, and antisubmarine warfare training. She spent the month of November at the Puget Sound Naval Shipyard undergoing repairs to her nuclear power plant and returned to San Diego on 4 December. For the remaining three weeks of 1977, *Truxtun* operated out of her home port.

The first three months of 1978 were spent in operations off the west coast in preparation for *Truxtun's* forthcoming deployment to the western Pacific. The ship departed San Diego on 4 April and spent the next six months in operations with the 7th Fleet which took her as far west as the Arabian Sea and as far south as Perth, Australia. During this cruise she also visited Colombo, Sri Lanka, Singapore, Hong Kong, and Pusan, South Korea. *Truxtun* returned to San Diego on 27 October. Local operations out of San Diego, following post-deployment stand-down, concluded the year.

1980s

On 26 February 1980, *Truxtun* departed San Diego, CA for her eighth WESTPAC deployment, this time as part of the *USS Constellation* Battle Group. In command was Captain E.M. Baldwin, USN with Lieutenant Junior Grade James Gentile, USN and Ensign Paul Killins, USN onboard.

Truxtun participated in RIMPAC 1980, a large multi-national Naval exercise near the Hawaiian Islands in March 1980. After a brief stopover in Pearl Harbor, *Truxtun* continued westward, arriving at the US Naval Shipyard in Subic Bay, Philippine Islands for a brief maintenance period. Following this in port period, *Truxtun* continued into the Western Pacific and Indian Ocean, eventually serving for an extended period of time in the Persian Gulf during the Iranian Hostage Crisis. Her primary duties were to act as the Gulf of Oman PIRAZ ship (call sign HARBOR MASTER). Toward the end of this deployment, which was extended due to operational requirements, *Truxtun* made port calls in Subic Bay, Philippines, Pattaya Beach, Thailand and Wellington, New Zealand. On 15 October 1980, the cruiser returned to its homeport of San

Diego.

On 20 October 1981, *Truxtun* got underway from San Diego, CA for her ninth WESTPAC deployment with Captain E.M. Baldwin in command. On 21 December 1981, he was relieved of command by Captain J.D. Pearson. Other friends making this deployment were Lieutenant Junior Grade Doyle Thomas, USN and Lieutenant Junior Grade Ron Havlick, USN.

In port periods again included Pearl Harbor and Subic Bay en route to the Western Pacific, Indian Ocean and the South Pacific. Much of the time *Truxtun* spent on underway operations during this deployment was in the Indian Ocean. Port calls included Mombasa, Kenya, Perth, Western Australia, Diego Garcia, British Indian Ocean Territory, Brisbane, Queensland Australia, Hobart, Tasmania Australia, Nuku'Alofa, Kingdom of Tonga, and Wellington, New Zealand.

On 12 June 1982, *Truxtun* returned to her homeport of San Diego to begin preparations for her upcoming Complex Overhaul (COH) at the Puget Sound Naval Shipyard.

From September 1982 to July 1984 *Truxtun* underwent her final complex overhaul at Puget Sound Naval Shipyard which included upgrading the combat system suite to its final configuration.

On 15 January 1986 *Truxtun* left on her tenth WESTPAC, this time serving as the Anti-Air Warfare Commander for Battle Group FOXTROT. In April, because of increased tension in Libya and the Gulf of Sidra, *Truxtun* was diverted to the Mediterranean along with *Enterprise* and the U.S.S. *Arkansas* GGN-41. After almost two months of operations in the Mediterranean, the three nuclear-powered ships were directed home by way of Gibraltar, the Cape of Good Hope, Western Australia, the Philippines and Hawaii. By the end of the seven-month deployment the all nuclear group had steamed over 65,000 miles and operated in all four numbered U.S. Fleets.

On 26 October 1987, *Truxtun* deployed with Battle Group FOXTROT on her first Northern Pacific deployment and participated in one of the largest Surface Action Group exercises ever massed. *Truxtun* again deployed with Battle Group FOXTROT on 5 January 1988 for her 11th Western Pacific-Middle East deployment. *Truxtun* also participated in Operation Praying Mantis. This cruise earned *Truxtun* the Armed Forces Expeditionary Medal and her second Meritorious Unit Commendation. Upon return from deployment, *Truxtun* spent 9 months in Puget Sound Naval Shipyard undergoing a Drydocking Selective Restricted Availability. On 1 October 1989 *Truxtun's* homeport was shifted to Bremerton, Washington.

On 1 February 1990, *Truxtun* deployed with the aircraft carrier U.S.S. *Carl Vinson* (CVN-70) in Battle Group Charlie. The Battle Group participated in TEAM SPIRIT 1990 with U.S. Marines and forces from the Republic of Korea. *Truxtun*, along with Battle Group Charlie, then proceeded to the Indian Ocean and North Arabian Sea, where *Truxtun* was tasked with escort duty in support of Operation Earnest Will, where she escorted several re-flagged Kuwaiti oil tankers through the Straits of Hormuz and the waters of the Persian Gulf. These duties earned *Truxtun* her second Armed Forces Expeditionary Medal. During much of this deployment, *Truxtun* served as Anti Air Warfare Commander, Electronic Warfare Commander and as the AAW Picket for Battle Group Charlie. *Truxtun* also spent a considerable amount of time steaming independently of the battle group conducting various operations and tasks, including a freedom of movement

exercise through the Maldives. Port calls included Pearl Harbor Hawaii; Pusan, Korea; Subic Bay, Philippines; Singapore; Diego Garcia, British Indian Ocean Territory; Perth, Australia and Hong Kong. *Truxtun* returned from her 12th WESTPAC to her new home port of Bremerton Washington. Although *Truxtun*'s home port was changed in October of the previous year, *Truxtun* kept port in San Diego, California while continuing work-ups for this deployment.

Truxtun departed Bremerton for her 13th WESTPAC and a Middle East deployment on 16 August 1991. *Truxtun* performed duties as the Persian Gulf Anti-Air Warfare Commander, Force Track Coordinator, Electronic Warfare Commander and alternate Anti-Surface Warfare Commander during Operation Desert Storm. *Truxtun* also served as the Commander, United States Mine Counter-Measure Group One flagship during minesweeping operations off the coastal waters of Kuwait. During her time in the Gulf, she spent most of her time guarding the 'sweeps,' wooden mine sweepers deployed to search for water-borne mines in the Gulf. Later during the same cruise while in the Gulf of Oman, *Truxtun* was tasked with escorting re-flagged Kuwaiti oil tankers in Operation Earnest Will.

After a short upkeep period in Bremerton, *Truxtun* began a two-month Counter-Narcotic mini-deployment off the coasts of Mexico and Central America, which ended in June 1992. The ship went 42 days completely unsupported by any other ship. It found no vessels moving narcotics.

From 12 February 1993 to 1 August 1993, *Truxtun* was underway for her 14th and final WESTPAC. On 19 February she began a high speed independent transit from Pearl Harbor, Hawaii to Melbourne, Australia covering 7,180 miles in 11 days at an average speed of 25 knots. On 21 March *Truxtun* rendezvoused with the *Nimitz* Battle Group in the Indian Ocean and transited the Strait of Hormuz. While operating in the Gulf *Truxtun* conducted several multi-national force exercises including operations with the Kuwaiti Air Force. On 22 April *Truxtun* was detached from Battle Group operations and proceeded to the Red Sea to enforce United Nations Security Council sanctions against Iraq by boarding vessels bound for the Jordanian port of Aqaba. Utilizing two teams, *Truxtun* queried 126 merchant vessels, boarded 73 and diverted seven ships.

In 1994 *Truxtun* was the platform of choice for a variety of missions which included participation as opposition forces for fleet exercises, providing naval gunfire support spotter services and being Deck Landing Qualification platform for LAMPS helicopters. *Truxtun* also served as the escort ship for *U.S.S. Reclaimer* (ARS-42) which towed a defueled nuclear submarine to Puget Sound Naval Shipyard. She participated in two Chief of Naval Operations projects off the coast of San Francisco and conducted shipboard training at every opportunity. From 23 May to 17 June, *Truxtun* served as Coalition Forces flagship for CTF 331 during the highly successful RIMPAC 94 multi-national exercise.

On 18 August 1994 *Truxtun* departed Bremerton on her final operational commitment. Originally assigned to escort the tow ships for two defueled nuclear submarines from Rodman, Panama to Puget Sound Naval Shipyard, the orders were changed on short notice and *Truxtun* chopped (change of operational control) to Commander, Joint Task Force Four to conduct Counter-Narcotic operations for a second tour in the War on Drugs. On 3 September *Truxtun* transited the Panama Canal for the first time in her history and began patrolling the Caribbean Sea.

On 14 October 1994, and purely by a twist of historical coincidence, *Truxtun* sailed the same waters in the southern Caribbean Sea where USS *Constellation*, under the command of Commodore Truxtun, had dueled with *La Vengeance* almost 200 years earlier.

Truxtun was decommissioned on 11 September 1995 as a money-saving measure and was stricken from the Naval Vessel Register the same day. Her executive officer at the time of decommissioning was Commander John R Hawk III, USN. She was disposed of by ship recycling, which was complete by 16 April 1999.

U.S.S. Truxtun's Awards, Citations and Campaign Ribbons



Precedence is top to bottom and left to right

Top Row: Navy Unit Commendation, Navy Meritorious Unit Commendation (three awards)

Second Row: Navy Battle Efficiency Award (three awards), Navy Expeditionary Medal (two awards), National Defense Service Medal (two awards)

Third Row: Armed Forces Expeditionary Medal (two awards), Vietnam Service Medal (eight campaigns), Southwest Asia Service Medal (one award)

Fourth Row: Humanitarian Service Medal, Sea Service Deployment Ribbon (10 awards), Republic of Vietnam Gallantry Cross

Fifth Row: Republic of Vietnam Civil Actions Medal, Republic of Vietnam Campaign Medal, Kuwait Liberation Medal