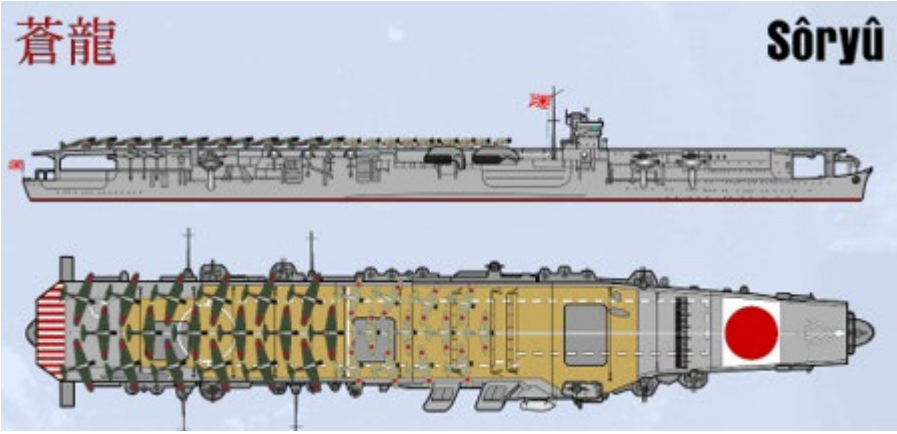
1/32 Soryu Carrier Deck for the Tamiya A6M2 Zero

Building the Soryu deck for the A6M2 Zero, B1-151 flown by Lt. Fusata Iida in the Pearl Harbor attack by Brian Fowler.

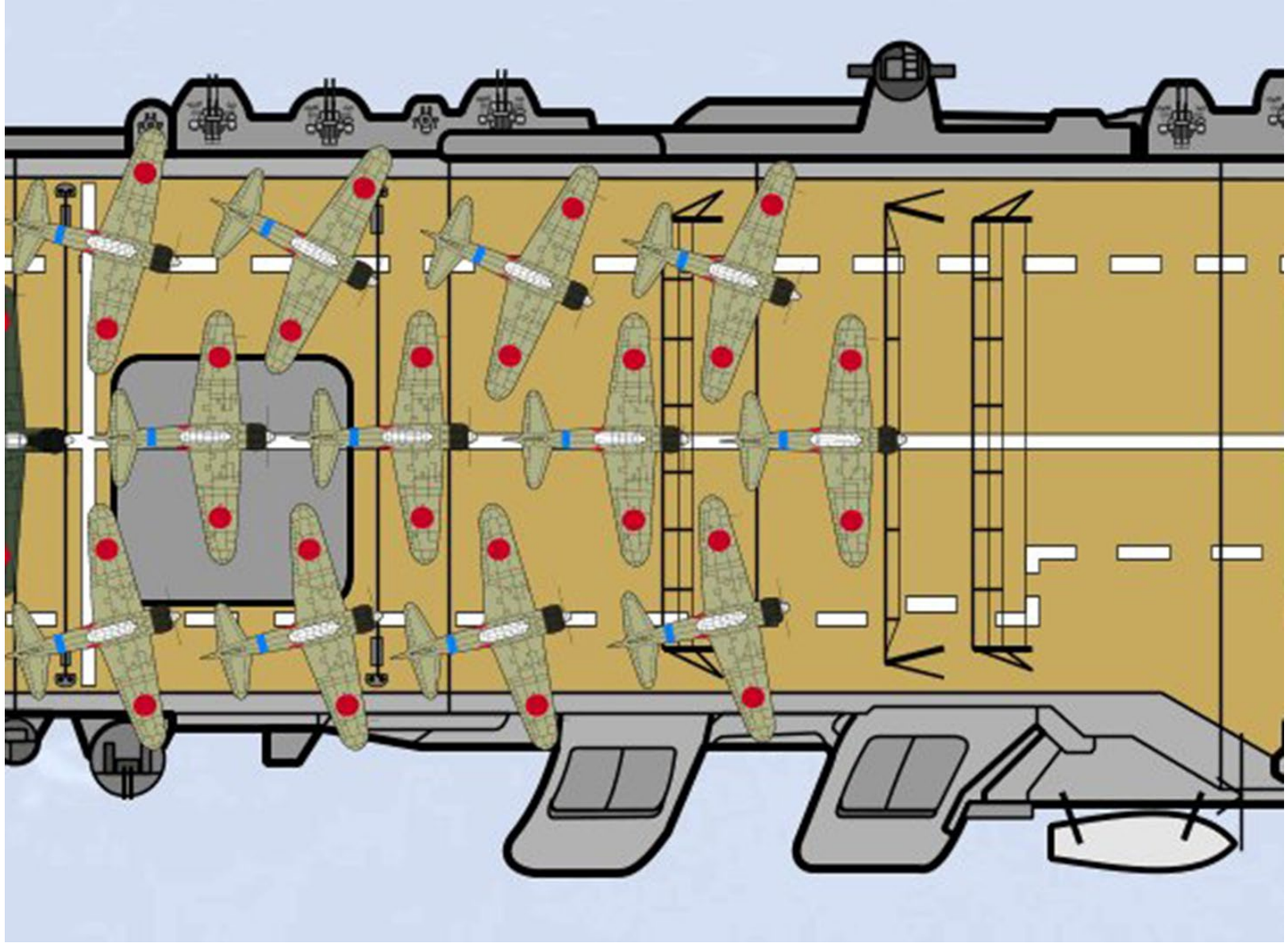
I couldn’t find any good photos of the Soryu deck. This is her sister ship, the Hiryu. Note the tie downs are installed between deck planks. On some carriers they were installed in the middle of the plank. Based on this photo, other research, the Tom’s Model Works instructions, plus just “what looked right”, I chose to install my tie downs between every 9 planks.

This is a photo of the Akagi I used as reference for the weathering of the deck.

Note that even though the bare wooden sections of the deck show some significant weathering and stains the white sections are pretty clean. I assume these guides for pilots were kept clean and maintained well.



I found a color profile of the Soryu and used this as my guide to paint the white stripe and wingtip guide dashes. I scaled these by using the size comparison to the Zeros on this artwork and then scaled up using those proportions with the 1/32 Zero. I also used this as a reference in how to angle the placement of my Zero on the 1/32 deck section I created.



I used 3/16″ wide by 1/16″ thick basswood strips for the deck, sanding them smooth before applying them to my base.

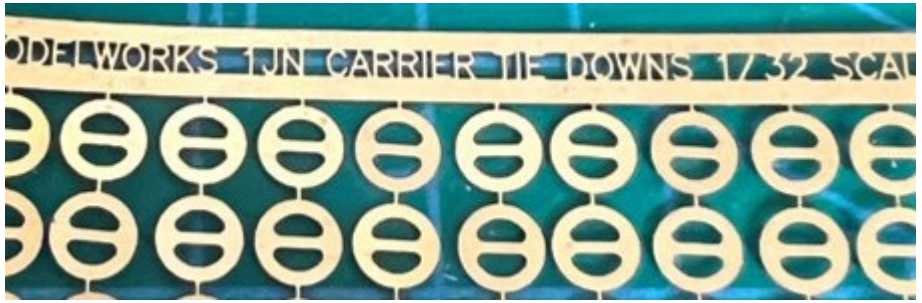
I spent a lot of time thinking of how to build my deck and what to mount it on. I wanted something rigid that would not warp or deform when staining and weathering the strips or over the passage of time. I came across 12x12 self-adhesive linoleum tiles at Lowe's and decided to use one inside a shallow 12 x 12 shadowbox from Michael's. I peeled the adhesive covering off the back of the tile and applied my deck strips to it. If I messed up a piece, or didn't like the color, I peeled it off and replaced it. After this was done, I rough cut the sides to fit the shadow box and sealed the edges with CA glue.

I bought Tom’s Model Works PE Japanese Carrier Tie Downs. They are nice but not thick enough nor do they have the full cup structure. I experimented several ways to cut holes in the basswood strips and install tie downs flush to the level of the strip.

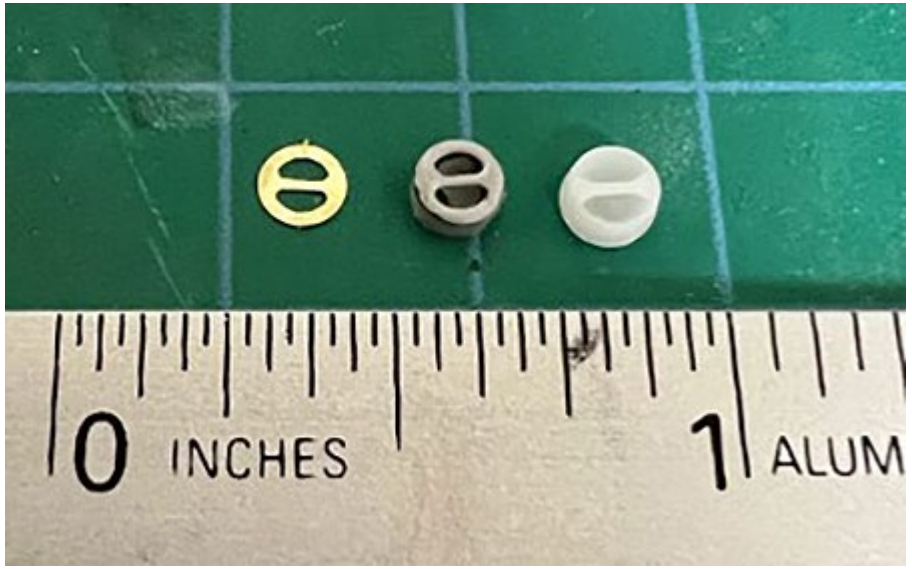
Dissatisfied with the thin PE tie down or any of my attempts, I asked one of the IPMS Pelican club members (a retired NASA rocket scientist) who had brought 3D Space models he had printed to previous meetings if he would print tie downs if I provided him a master. He said he would be happy to take this on to both assist my project and develop his 3D designing and printing skills.

I glued a Tom’s Model Works PE part to a plastic rod I had drilled and sanded a shallow dish shape into one end. I applied Mr. Surfacer 500 to build up the thickness of the tie down. I gave him the master and he asked me how many I wanted. I asked for 60, and a week later he gave me 100.

I should have tapered the side of my master to more easily install them in the deck. I took my time to shave and taper each one to fit the holes I drilled into the deck.



Tom’s Model Works PE Tie Downs



Left to right: PE tie down, my master tie down, and 3D printed one using the master as the design reference.

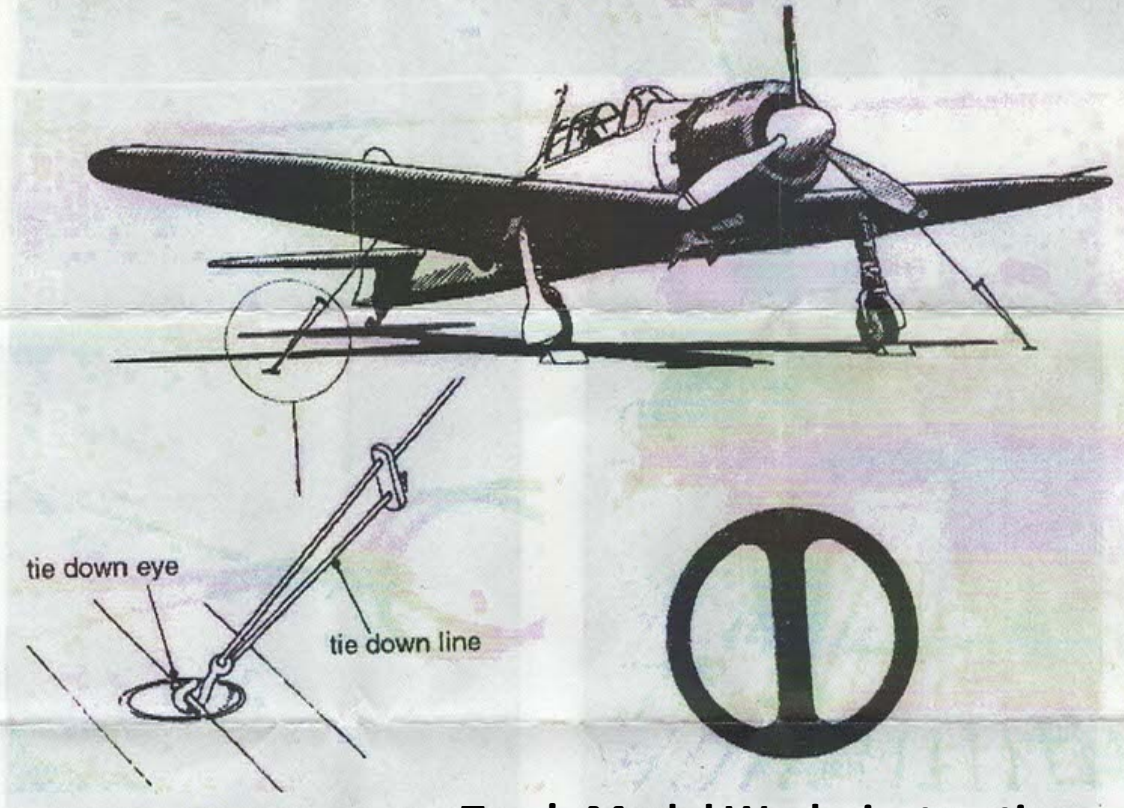
Imperial Japanese Navy Tie Downs 1/32 scale

512

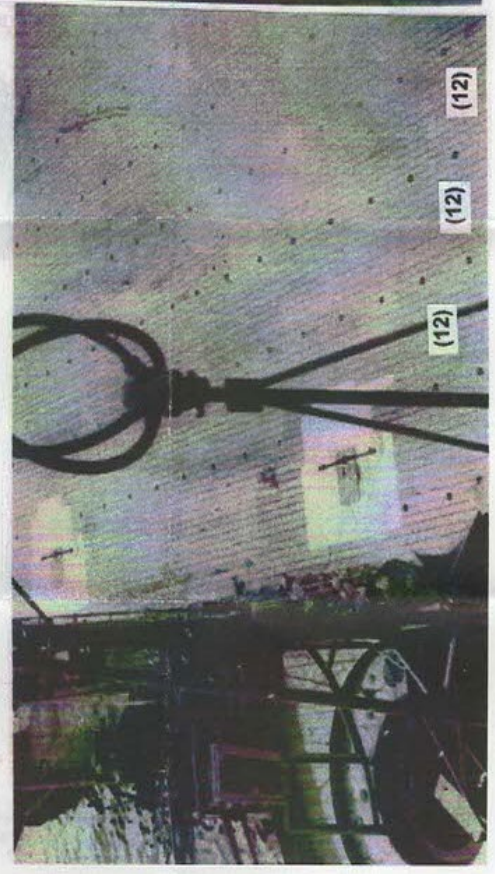
Do not remove any parts from the tree until you are ready to add them to the model or assemble them. If you use an X-Acto blade or comparable to cut the parts off the sheet, it's best to have a hard surface underneath to prevent bending the parts. Cyanoacrylate glues (super glue) or "white" craft glue (such as Aileen's or Gator Glue) may be used to attach or assemble brass parts. Before assembly, wash the parts with a de-greasing soap to facilitate painting. When bending is required, we recommend the modeler use a bending tool such as Hold & Fold provided by The Small Shop or use a sharp-cornered straight-edge such as the X-Acto chisel style blades (#17, 18). Place a flat surface over the part to hold it in place and slip the blade under the part to be bent. This will ensure a good, clean bend. If bent incorrectly, simply turn the piece over and flatten the bend out (brass is very forgiving). Dowels or other forms can be used to mold curves.

The locations of tie downs on Imperial Japanese Navy carriers were variable. For instance, in the top photo on the reverse side, Zuikaku shows tie downs mounted between planks at both 9 and 10 planks apart and about 10"-12" (25cm - 30.5cm) between tie downs. In photo #2, Akagi shows tie downs mounted in one plank rather than between them and also 10"-12" (25cm - 30.5cm) between tie downs. The third photo show Junyo with tie downs mounted between planks and 12 planks apart but much further between tie downs - 30" (91.5cm).

Typical tie down arrangement on an Imperial Japanese Navy Carrier



Some hooks and adjusters are provided.



Tom's Model Works instructions and reference info. Nothing specific to the Soryu.

Here is the deck after applying the strips to the back of the linoleum tile and staining them with artist oils thinned with mineral spirits. I also used oil paints and Tamiya Brown and Black panel liner splattered to make oil and other stains.

When staining the deck I tried to achieve a golden tan color as reported by the Dauntless pilots at Midway.

I used an Ivory Black pencil to darken the plank separations as seen in the photos of Japanese carrier decks. I suspect this may be some sort of tar material to seal the deck.

Close-up of the deck showing a wheel chock and tie downs.

The wheel chocks came with the Tamiya kit. I added some wood grain effect to them by scraping a razor saw across their surfaces.

I made the “rope” for the wheel chocks using model ship rigging which has a much tighter, less fuzzy weave than the string supplied in the Tamiya kit.

To get the rope to lay flat and shape as I wanted, I put the completed chocks with the rope on a sheet of glass and used thinned Elmers Glue to fix them to the glass. Once dry I used a razor to scrape them off the glass and then glued them onto the deck.


51

Here is the underside of the base.

The linoleum tile was somewhat flexible so I cut a piece of wood and pushed it up against the underside of the deck and used small wood screws to fasten it to the shadowbox frame. If I decide to alter the deck or mount a different plane on it, I can simply remove the screws and take it out of the frame.

The Zero is securely fastened to the deck by drilling holes in the aftermarket resin tires, gluing in pins, inserting the pins through holes in the deck, and then gluing the pins from below.

The completed deck with A6M2 B1-151 flown by Lt. Fusata Iida on 12/7/1941.

He was the second wave fighter commander. When his plane was damaged, he attempted to dive his Zero into a hanger. He was buried at Kaneohe Bay Naval Air Station.

The brass plate was purchased from Trophykits.com

Although it doesn't appear so in the photos, the wingtips of the plane are entirely within the edges of the frame. I can safely transport the model to shows in a box without the box sides touching the model.


BI-151

Here's B1-151 photographed in full Florida sunlight by our pool.

Although I spent months on this deck the bulk of the time was spent planning how to do it, doing research, and experimenting with construction methods. Once I decided to use the linoleum tile for the backing and had the tie downs 3D printed the construction and painting took about 10 days. I really enjoyed doing this unique modeling project.

Here is the completed model with gold awards it earned at the 2024 Atlanta Figure Show and 2024 IPMS Jaxcon show, displayed in a hinged-top coffee table my wife found.

The rear table has a pair of 1/32 Bf 109's.

If anyone wants further info on this project and/or wants to build their own carrier deck, please feel free to contact me.

Brian Fowler
briandonaldfowler@gmail.com

These tables, and a display case with other of my completed models, form the centerpieces of my study my wife helped me decorate.