Staying in Port: Aircraft Design
Aviation Blueprints

A BLUEPRINT is a detailed plan that shows how something is built.

BLUEPRINTS of airplanes helped sailors to maintain and fix aircraft on board *Intrepid*.

This is the BLUEPRINT for an Avenger, an aircraft at the Intrepid Museum.
Intrepid’s Avenger

Once built, Avengers were also painted in different shades of blue and white. This helped the airplane blend in with the ocean, the sky and the clouds.

Coloring something so that it is hard to see against its surroundings is called using CAMOUFLAGE.

What animals use CAMOUFLAGE like the Avenger?
Camouflage Coloring

Help this Avenger camouflage into your home! Color it so it blends into your surroundings.

Ask an adult to help you print or trace this page onto a piece of paper.
A CURATOR is someone who chooses, presents, and protects the objects in a museum’s collection.

Eric Boehm is the Intrepid Museum’s CURATOR of Aviation. He is an Air Force veteran, who has always had a love for aircraft and aviation history.

Eric has a special connection with the airplane Avenger. His father was a 17-year-old Avenger gunner who flew from Intrepid’s sister ship USS Shangri-La, in 1944.
Demon Design

Sometimes aircraft designs don’t work out the first time!

Click [here](https://www.youtube.com/watch?v=4WKi_2BQCoM) or the link below to listen to aviation curator Eric Boehm speak about how the design of the F3H-2 Demon changed over time.
Paper Plane Design Challenge

Create a paper plane using the attached instructions. Test your plane in a safe location.

- How high does it fly?
- How far?

Once you have tested Intrepid’s plane - try experimenting with your own design.

See if your design can fly higher or farther than ours!
First, choose the type of paper you would use and lay it out in front of you.

Fold the paper in half long-ways and press down on the fold.

Open the paper back up.
Fold the top corner down along the center fold so that it makes a triangle.

Make the same fold on the other side, so that the top of the paper makes a big triangle. Press down.

Now, fold one side in toward the center, so that the edge touches the center fold line again. Press down.

Make the same fold on the other side.
Fold your plane in half, so that the folds you have already made are on the inside.

Now, fold one side down, starting about 2 inches away from the point.

Flip your plane over and make the same fold on the other side.

Open the wings up and your plane is ready to fly. You are ready to test it out!
Thank you from the Intrepid Sea, Air & Space Museum!

Explore the Museum at home using [Google Arts and Culture](https://artsandculture.google.com/partner/intrepid-sea-air-and-space-museum)