



Painting your Seabee (or just part of it)

Description:

A really good paint job starts with preparation! 95% of your time will be spent just getting the airframe (or whatever) ready for paint. They say patience is a virtue and none more virtuous when it comes to our Seabees. Take your time. After following the preparation procedure below, start over and do it again. Sand and sand again. The surface must be clean and free from dirt, grease and dust. Even the smallest particle can ruin an otherwise great paint job. Make sure you wash your hands and wear good disposable latex gloves (not plastic) before you start the process.

WARNING: If you decide to use Polyurethane or Epoxy paint, use a full body suit and a good respirator! It has been proven that these volatile chemicals cause cancer and other life threatening maladies. Be safe.

Let's begin:

- ➔ Strip the surfaces with a good paint stripper if necessary.
- ➔ Wash the surface completely with a good residue-free detergent (Dawn)
- ➔ Sand the high points slowly and lightly with 320 grit wet-or-dry sandpaper. Be sure all the dirt and grease is gone. Do not sand the top of the rivets! (see story below)
- ➔ Make sure the parts are completely dry.
- ➔ Using the 3M green tape or vinyl tape if you are painting a fine line and mask off areas you don't want painted. Use paper to cover the large, open areas.

Hint: Use masking tape to cover the part (airframe) where you don't want paint initially. Then, use paper with tape on the edge to cover the rest of the part overlapping the first tape by half the width of the tape. You will use twice the tape but it makes for a much better job.

- ➔ Scotch-Brite all surfaces. Be careful around rivets again.
- ➔ Prepsol all surfaces and wipe clean with a soft lint-free rag.
- ➔ Tack rag entire surface to be painted.
- ➔ Make sure the painting area is free from dust and flying debris. If you are painting inside (I hope you are) wet the floor to keep the dust down to a minimum. Also cover or move anything you don't want to get overspray on. Overspray goes everywhere!
- ➔ Start your compressor away from your work area. The gun pressure should be about 35 psi. You can adjust it slightly for the best spray pattern.



- Prime the surfaces as necessary (bare aluminum). Scotch-Brite and tack rag after the primer dries completely (about a day).
- Mix the paint as the paint label recommends. Keep in mind that some paints, even from the same paint brand, require different ratios of reducer and hardener.
- Fill the paint gun about $\frac{3}{4}$ full.
- Test the spray pattern on something disposable (cardboard, scrap aluminum, etc.) Adjust the spray pattern as necessary to get a straight, vertical pattern with no noticeable variation.
- Start with a very light coat that just barely covers the surface. Spray in one direction only (either horizontally or vertically) and overlap the previous spray pattern by half.
- Wait 10-15 minutes.
- Spray a heavier second coat 90° to the previous spray pattern. If a third coat is required use the first spray pattern. Not too heavy a coat as drips will surely appear.
- After an hour or so, remove just the edges of the masking to expose the part. This allows the paint to form a very smooth line and allows the paint to “settle” Leaving a very sharp line. Leave the majority of the paper on until the paint is completely dry. Removing the paper now may hit the paint and cause a smear or noticeable imperfection.
- Let it sit for at least a day! Two or three days is better.
- Clean up you gun and the rest of your mess.
- Take your wife/girlfriend/significant other out to dinner.
- After the paint has dried completely, remove the rest of the tape and paper.
- If a trim color is used, mask off as above and lightly Scotch-Brite the exposed area. This will allow the trim color to bond better to the base color.
- Repeat as necessary.

List of materials:

- Dawn dish washing soap (leaves no residue and safe on aluminum)
- Access to a water supply
- Plenty of towels (paper and cloth)
- Sandpaper (320 and/or 400 grit wet-or-dry)
- Scotch-Brite pads (the red ones)
- Tack rags (available from paint supply)
- Masking tape (the 3M green stuff)



- 1/4" Vinyl fine line tape (if required to make fine lines and swirly patterns)
- Masking paper or newspapers
- Lacquer thinner for clean up (at least one gallon)
- Prepsol (available from paint supplier. It may go by another name)
- Epoxy primer if necessary
- Paint (Acrylic enamel is good. About 4 gallons for the Seabee)
 - Note:** Don't skimp on paint! Get the good stuff. You won't be sorry. (PPG paint is great)
- Appropriate reducer for the paint
- Hardener for the paint. Makes the paint dry faster and is rock hard.
- Plenty of stir sticks
- A good spray gun with a pressure gauge on the inlet line at the gun. The last good one we bought was about \$55.
- Compressor with regulator and pressure gauge
- Clean work area with exhaust fan if possible
- Respirator with good filters
- Measuring vessel (available at the paint store)
- Latex gloves
- A big garbage can
- Plenty of time

Hint: To measure the right ratio of paint, hardener and reducer mark a stir stick in 1/8" increments to get the right mix. For example, an 8-6-1 ratio would be 8 parts paint, 6 parts reducer, 1 part hardener. So, 8/8ths, 6/8ths, 1/8th would be the marks on your stir stick for the right mix. If you need more, use multiples of 1/8" for the amount of paint you need. Always make a little more than is required! The paint container **MUST** be cylindrical and not tapered for the measurements to work right.

Estimated cost: \$2000 not including tools, compressor and gun.

The above procedure has worked really well for a few airplanes we have painted. If you take your time and use good ingredients you will get a super paint job.

If you find that something ruined a small spot on your airframe or part, you can try sanding it out lightly and spot paint it. Let it dry for a month or two and then buff it out with some fine rubbing compound. You can use an electric buffer but be careful not to push too hard as you will surely melt the paint! (and don't call me Shirley).

The vinyl tape is used on patterns above the base coat. It is very good tape to make a sharp line but, it stretches very easily so don't pull on it too hard during the application process. It removes easily after the paint has dried for an hour or so.

To get rid of those drips (if you get them) sand them out with 320 grit wet-or-dry sandpaper gradually working down to 1200 grit or more. You would be surprised how well that works. You can then buff it out with rubbing compound and even a cleaning type protector (Color Back, Nu Finish, etc.)



I found that Acrylic Enamel is the best overall paint to use. It is very durable and sprays on easily (my Acrylic paint job is 35 years old). Get the best paint you can buy! There is a difference. It can also be buffed to a mirror finish if you have time to spare. Don't wax or buff it for a few months. The paint takes a long time to dry completely.

Have fun and send me a picture!

Sad story: There have been times that a less than professional painter sanded rivets so much that the airframe was rendered un-airworthy. The airframe was a total loss. AN rivets have a small dimple in the top that allows you to drill it out and replace it if necessary. If that dimple is gone it is not legal. Even flat head rivets have the dimple so sand very gently around rivets. It does take some time but it will be worth it. Good luck!