

Aircraft Painting Experience

1974 Cessna 172-M

It's more than just paint:

Thinking about repainting your plane? In this article I'll share the lessons learned when we finally got our 1974 C172-M repainted. Bottom line, a project like this is so much more than just paint.

Background: We were lucky enough to purchase this hangared, low-time Cessna 172-M with a relatively new, upgraded engine nine years ago. It was an amazing find and dream come true.



The first photo after arriving home from ArtCraft Paint

Over the last nine years we made improvements to the plane by refurbishing the interior plastic, new seats, new windows, ADS-B upgrade and reworked the panel but year-by-year we were losing the battle with the sun. The paint finish was now dull and areas of weak or thin paint were vanishing before our eyes. The top of the wings were suffering the most with paint flaking away around the rivets and even our mechanic said, "you need to get this plane repainted". It was the end-of-life for that 51 year old factory paint.

It's more than just money: Thinking about repainting your plane, start shopping and get quotes. In my case I wanted to get the plane repainted for years, so I slowly conducted research, talked with several people, wrote to different paint shops, consulted with my mechanic and when we got serious about doing the project, I had a good idea who to contact.

I sent the shops photos of the plane, described what I wanted done and surprisingly some shops didn't respond, some responded with a simple two page quote with terms and conditions and one shop who stood out from the rest was ArtCraft in Santa Maria, Ca.

ArtCraft responded with a 27 page personalized quote/contract describing the business engagement, project payment schedule, optional upgrades and work to be performed in detail.



ArtCraft painted Skyhawk

My first reaction was wow, this is a real business, a business with a great deal of experience not with just painting planes, but working with a wide variety of customers.

I spoke to a couple people who recently had their planes painted at ArtCraft and they had nothing but great things to say about them. ArtCraft's quoted price was in the ballpark with the others, they paint over 100 planes a year and they could easily work me into their schedule.

I selected ArtCraft because of their

professionalism, their reputation for quality work and because they are more than just a paint shop. They're a woman owned business, are very involved with the community and a big employer in the local Santa Maria area.

The painting experience: ArtCraft told me any exterior plastic parts with cracks will need to be replaced so before delivering the airplane I inspected it with a critical eye. They suggested replacing plastic with fiberglass parts from Stene Aviation located in Montana, and wow, what an amazing company. I identified having to replace my rudder cap, rudder bottom, both elevator caps, horizontal stab caps, mid-dorsal fairing, dorsal nose, main wheel brake fairings, landing gear fairings, wingtips (upgraded to Stene's LED molded wingtips).



I'm a VFR pilot so I needed a good weather window to deliver the plane. I studied the weather for weeks, fog patterns, flew there in the simulator, studied the airport using FlightRadar24 and at long last, it was time to go. I packed the plane with all my replacement parts, double checked the flight with WXBrief and I was off.

The 3 hour flight went exactly as planned and I was greeted by the ArtCraft team when I rolled up to their massive main hangar. I say main hangar because they must have 4 or 5 hangars where different work is being done, plus another area for upholstery and interior work. Very impressive.

After a tour of the facility, meeting several people and formally checking-in the plane, we reviewed the work to be done.

I wanted the same original factory design and color scheme, the same tail number size/font, same size/font for wingtip lettering and my tail Skyhawk logo. Incredibly at ArtCraft they don't use stickers or decals, everything is painted on the plane.

With the aircraft check-in complete, I picked up my rental car at the airport terminal and started the 6 hour drive home.

The first thing you receive from ArtCraft is an Aircraft Incoming Inspection report. The document is very detailed and in my case, it was 123 pages long. After reading the report, grading the condition of the plane and photographically documenting EVERYTHING you might wonder how the plane ever flew. My cute somewhat good looking airplane only scored 38/60 - a 63% pass score. The level of detail in this report is almost overwhelming but essential.



And with that done, the work begins. I won't bore you with every detail but it needs to be mentioned they go to great lengths protecting the windows, tape all the aircraft seams and protecting the engine during the paint stripping process. After that stage they strip remaining paint by hand around the windows and seams.

Surprises along the way: Going into this project I knew from past aviation project experience it would probably cost more and take longer than expected. And this was true because my original paint was enamel, requiring more work to remove but mostly because I purchased upgrades to the aircraft, had them install the



White base coat applied and masking for color coats

new fiberglass pieces, additional cost to paint the Skyhawk logo and CorrosionX treatment.

The true test: If everything during a project of this size goes perfectly that's great, but for any complex project there are bound to be some issues that pop-up along the way. In my opinion the true test of a company is how they deal with these surprises, how they communicate with the customer and their commitment to a positive outcome. ArtCraft scores very highly here.

Issue #1: Cessna documentation

provided us with the "name" of the factory red paint but ArtCraft couldn't locate the paint color code or a source for the paint. They worked this problem for weeks with their business partners while the plane was being stripped and prepped for paint. They contacted several sources including Textron but there was no clear answer. What I learned is that even if you have a "paint name" it's meaningless unless you have the paint codes for the color.

And this is where their years of experience in the business pay off. During the airplane check-in process they brought out color chips to identify the best match for the red just in case the color couldn't be located. Based on this information they selected the closest color match and sprayed a "test sheet", then FedEx'd the sample to my home for review and approval.

Issue #2: Near the end of the project one of the mechanics installed a fiberglass piece incorrectly on the fuselage. I noticed the problem in one of the photos they sent me but not to worry, they agreed it was a mistake, ordered a new part, had it shipped overnight and within a few days the issue was resolved. Bottomline, unexpected stuff happens and in my opinion, it's how a company deals with these surprises that separates the best from the rest.

Conclusion: In the beginning of this article I said, "It's more than just paint". Yes we went there to get our plane stripped and painted but in reality, it was more of a restoration process.

ArtCraft identified and treated any corrosion, installed new flight control hardware, installed new stainless steel screws, fixed a small dent in the leading edge of my left wing, repaired cowlings and wheel pants fiberglass, upgraded my cowlings fasteners to the stainless steel Cam-Loc system, replaced factory plastic with new fiberglass parts, new rubber sealant around windows, applied ceramic coating, CorrosionX and the list goes on and on.

I was impressed with the ArtCraft experience and highly recommend their services. Throughout the project they kept me informed with weekly and/or daily updates, photos, videos, always responded to any questions in a timely fashion and their work comes with a 1 year warranty. N522DC is bright and shiny again.

To view more project photos visit: <https://www.eaachapter526.com/n522dc-project-gallery.html>

Enjoy your flying, Mark



Photo from the return flight home