SHOULD I FIX MY FUSELAGE

Good question. I’m glad you asked. Nick Smith sr, my dad, started fixing fuselages about 35 years ago. He made a fairly crude fixture by today’s standards to start fixing Aeronca Champs, Citabria’s and Chiefs. He probably fixed about 20 Aeronca frames before branching out to Piper fuselages before I came along. I rebuilt approximately 15 Piper fuselages before we really got our Supercub business going. For approximately 10 years there wasn’t time to fix any fuselages. We were full bore building new supercub kits. After we sold our Supercub business and things didn’t work out with the new owners I put a small ad on barnstormers and I had my hands full with Piper PA-18, PA-12, PA-11 and J-3, fuselages to rebuild, also occasionally incorporating stretched pacer’s (Bushmasters) during this time. I also have rebuilt quite a few Champs, Citabria’s and Chiefs as well. Obviously a plane with only minor damage or minor rust is worth rebuilding and incorporating any modifications you have been thinking about. We always sand blast the fuselages so we can do the best job possible and also so we don’t miss any bent or rusted tubes. When it comes to badly damaged fuselages it can be a hard decision whether to rebuild a 60 year old fuselage or just order one up. A lot depends where your fuselage is damaged. Heavy damage in the cabin area, especially by the landing gear and strut fittings, is harder to fix than just a bent tail or upper structure. If your plane is badly damaged and has significant rust, it might be worth buying a new one. I have fixed a lot of PA-12’s and PA-18’ because of the cost of a brand new one. A typical PA-12 repair is usually $5000 including most popular mods,
sand blasting and priming. With a new frame from Univair will run about $15,000. Time is also an issue. Sometimes when we’re really busy it can be 6-12 months to rebuild a fuselage and you may want to get going right away on your rebuild. The most I’ve charged for an Aeronca style fuselage rebuild is $3000. More than that and people tend to look for a good used one for sale. I hope this helps with your decision whether to fix up your old fuselage or bite the bullet and buy a new one.

**PA-12 SUPERCRIUSER VS BUSHMASTER**

I thought I would do a little comparison between the PA-12 Super Cruiser and the Piper Bushmaster. First let’s describe each plane. The Piper PA-12 was built by Piper between 1946 and 1948. The Pa-12 was an upgrade from the original J-5, with more power and a metal spar being the major upgrades. The new PA-12 originally had the 0-235-C Lycoming. The PA-12 is flown from the front seat. While it is listed as a 3 seat plane, it would be awfully hard to fit 2 modern day, normal size adults in the back of these planes. Piper also made a 4 seat configuration called the PA-14 Family Cruiser but it would be very tight for 4 adults, probably more of a comfortable 2 place plane. Wag Aero made a kit of the family cruiser called the Sportsmen 2+2, and I’m sure there are quite a few of them flying now. Because the PA-12 Super Cruisers have been around so long and because of the ability to make a great bush plane when modified, there are a very large amount of STC’s for these planes. Probably more so than any other planes. We built approximately 8 brand new experimental PA-12 planes incorporating most of the popular mods. The most popular mods are flaps, left side sea plane doors (gull wing style), big baggage with the dog leg tube, baggage doors, upper baggage in
the former area, weld on float fittings/water rudder tabs, large tail handles both sides, big tanks (that don’t leak like the originals), super cub style gear, supercub style tail feathers(balanced), adjustable front seat (similar to supercub), 180 hp Lycoming motor(with the short mount) square wings with the long flaps and ailerons, etc. I should mention that the PA-12 Supercruiser owners are some of the most passionate people about their planes that I have ever seen. If you own a PA-12 there are no other planes that compares for these owners. For our purposes we’ll compare one of our highly modified Supercruisers with all the mods. The bushmaster plane is definitely not as well known but is still pretty popular among people that like a utility style aircraft. A bushmaster plane is when you take a Pacer fuselage and stretch it out to the same length as a PA-12 style plane (approximately 28 inches) and add full length wings and supercub tail feathers, cub style gear and usually the pilot side door is added. You can also use a Tri-pacer or a Colt fuselage as they are very similar. There are a couple of variations of these and there have been several different people who have helped develop these planes over time. There was a certified version called a Superpacer and in Alaska there is a certified version called the Producer. For our purposes we’ll use the same wing, square with the long flaps and ailerons and the 24 gallon tanks, so basically the wings are the same so that’s a wash. Both planes use the supercub tail so that’s a wash as well. When it comes to the landing gear there a couple of variations for the bushmaster. One uses the original fittings and incorporates the original bungee system for suspension and offsets the wheels forward to give you a proper C of G. the other system requires you to weld on fittings and basically incorporates a supercub gear. It’s really up to the owner which is best for him. A 150hp engine is just fine for the bushmaster on wheels but for floats we prefer the 180 hp Lycoming. Where the difference really lies between these 2 planes is the fuselage configuration. While I wouldn’t call the PA-12 a true 3 person plane the bushmaster definitely is a 4 person plane. It is nice to have that capability and if there is only 2 people the rear seat comes out
giving you more cargo area. The bushmaster frame has a much larger baggage area that you could actually sleep in with the rear seats removed. The bushmaster also has a huge cargo door (formerly the rear door) for loading all of your equipment in. I would also have to say the bushmaster is easier to get in and out of with its door configuration. The heavily modified pa-12 will weigh approximately 1200 and the bushmaster about a 100 pounds heavier with both having a 2400 pound gross. The cost of both planes will be approximately the same in the experimental category but the cost of a certified pa-12 version goes up quite a bit due to the cost of STC’s and certified parts. Because the PA-12 is a factory plane and the Bushmaster is a modified plane, the PA-12 will be better known but those that own a bushmaster know there true value. I hope this helps when deciding what your next project is going to be.

SOME SMITH SUPER CUBS

![SMITH AVIATION SUPER CUB – LONDON ONTARIO](image-url)
NICK SMITH SR’S PERSONAL SMITH SUPER CUB

SMITH SUPER CUB IN ALASKA
GREAT JOB BY BILL RUSK