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# Press Release

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## **“Fresh Pick” STC Increases Useful Load of Cessna 182P and 182Q Airplanes**

Technically known as FAA Supplemental Type Certificate SA03608AT, the “Fresh Pick” STC increases the useful load of the Cessna 182P and 182Q model airplanes manufactured from 1972 to 1980 by 150 to 160 pounds. And, this STC does it with no labor, parts or installation costs. In many cases, the airplane’s ramp weight increases by 160 pounds.

“You’ll also enjoy the widest CG envelope ever available for any fixed-gear Cessna 182,” says the STC’s developer, Tom Storli.

The rationale for this STC goes way back to 1956 when Cessna first certified the Cessna 182, and the maximum design gross weight (both landing and takeoff) was 2550 pounds. The standard useful load was then just over 1000 pounds. As the years passed, gross design weights were incrementally increased as changes were introduced to the basic 182 design.

When production of the new 182S model was finally restarted in 1996, the Maximum Gross Takeoff Weight (MGTOW) had grown to 3100 pounds, or a whopping 550 pounds above that of the first 182. And yet, the standard useful load had increased by less than 200 pounds, to only 1200 pounds. This loss in useful load was caused by increased empty weight due to the installation of more systems, modern avionics and “must have” improvements.

All of the early Cessna 182s were certified to Part 3 of the US Civil Air Regulations which originally prohibited a design landing weight less than the MGTOW. Only some time after Cessna’s type certificate was awarded did the CAA amend the regulations, recognizing that the requirement had “restricted unduly the utility of small airplanes.”

At that point, Cessna was able to certify the 182N in 1970 with a MGTOW of 2950 pounds, while keeping the landing weight at 2800 pounds. In 1981, Cessna did it again for the tubular gear 182R models; MGTOW became 3100 pounds, while landing weight remained at 2950 pounds. These numbers, providing the greatest loading flexibility, have been retained in all fixed-gear 182s to the present day.

Cessna did not, however, retrofit the 182R MGTOW increase to the structurally identical 182P and 182Q models. Storli says, “After all, those airplanes had already been sold. There was no technical reason for this omission, and FAA certification for these models has now been granted via our Fresh Pick STC.



“I know that Fresh Pick is an unusual name for an STC,” says Storli, “but these 182s are old airplanes, 28 to 36 years old, in fact. There hasn’t been a new uncomplicated STC for these 1972 to 1980 models in quite some time, certainly not one requiring this economical investment.”

[\( For higher res versions of this graphic, click here \)](#)

## **No Installation Labor Required**

Although the STC requires no parts or installation labor, it is still considered a “major alteration” to the airplane under FAA regulations. FAA demanded very thorough and validated engineering compliance reports in the areas of performance, structures, aerodynamic loads, maintenance, flight testing and acoustics, prior to granting the STC. Storli says, “The old saw suggesting that no project may be approved until the paperwork equals the weight of the airplane was very nearly proven.”

As unusual as the Fresh Pick STC is, calling for no physical changes to the airplane, aircraft owners still follow the same process and procedures as required for any other STC. The owner’s aircraft documents along with the STC documents are taken to the aircraft maintenance provider.

The A&P/IA or AME will prepare two copies of FAA Form 337 detailing incorporation of STC SA03608AT. As the “installer,” he or she will attest to the STC’s compatibility with previous STCs and repairs. In almost all cases this is a straightforward procedure, but the owner should be prepared to pay at least a nominal sum to the maintenance professional for time spent looking at the airplane records. After signatures in Block 7 are completed, approving the airplane for “return to service,” the aircraft owner keeps one copy with the aircraft records and the second copy is sent directly to the FAA in Oklahoma City.

The Fresh Pick STC is available for \$750. Much more information, sample flight manual supplements, and an order form may be found on line at [www.182stc.com](http://www.182stc.com). Volume discounts are given for multiple STCs, such as for a military, OEM or other fleet operator. Email [stc@trolltune.com](mailto:stc@trolltune.com) with the particular details of your fleet for a price quotation.

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