

GLASTAR SERVICE BULLETIN 36

MANDATORY

Subject: Auxiliary fuel tank sump drains

Applicability: Auxiliary fuel tank installations shipped prior to the publication of Rev. A of the GlaStar Auxiliary Fuel Tank Installation Instructions [P/N063-09021-01]

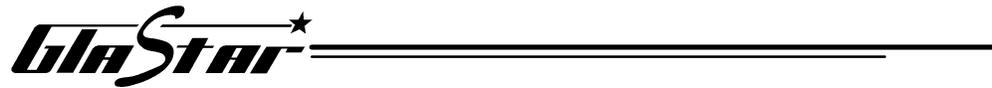
Discussion: The original auxiliary fuel tanks did not include defined sump areas, and no means were provided to drain the tanks other than through the fuel outlet boss at the inboard end of each tank. This led to a concern about the possibility of water collecting in the tanks.

We do not believe that the original aux tank setup poses any immediate threat to the safety of flight. Any water that finds its way into the aux tank will first fill the small area at the inboard end of the tank below the level of the outlet boss, and then flow ahead of the fuel into the main tank, where it will settle into the drainable main tank sump. FAR Part 23 permits auxiliary fuel tanks without sump drains provided the tanks drain completely into other tanks with drainable sumps.

However, because the aux tank outlet boss is situated slightly higher than the bottom of the tank, a small quantity of water could remain trapped in the aux tank more or less permanently. This is undesirable. At a minimum, such water would marginally reduce the amount of useable fuel the tank holds. Of more serious long-term concern is the possibility of fungal growth in the water that could restrict the aux tank fuel outlet. Such growth is most commonly reported in auto fuel, although some suggest that it can occur in 100LL aviation fuel as well.

We have decided to come up with a retrofittable drain fitting that can be installed at the inboard end of each aux tank to accommodate a standard fuel drain valve. We will make these fittings, valves, and any other associated hardware available at no charge to all original aux tank kit owners as soon as possible. (Future kits will include these items as standard parts.) However, it appears at this point that a custom-machined fitting will be required for this application, and this will necessarily take some time to design and procure.

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Required Action: Instructions for retrofitting the new sump drains will be provided to all original aux tank kit purchasers in the form of a **supplement to this service bulletin**. The supplement will be sent along with the required parts. Installation of the drains **within three months of receipt of the parts** or **within three months of first use of the aux tanks**, whichever comes first, is mandatory.

Meanwhile, builders should not hesitate to go ahead and install and fly the aux tanks according to the current instructions, as the new drains will be entirely retrofittable.

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