

# *GlaStar* and *Sportsman* Pre-Built Options

**Fly straight → to final assembly!**

## **Pre-Built Wings**

- Leading edge and lower skins installed.
- All flight control brackets and pulleys installed.
- Anti-corrosion primer applied to all interior aluminum surfaces prior to assembly.
- Upper skins fitted, drilled and ready to rivet.

## **Ailerons and Flaps:**

- Complete!  
(Included in Pre-Built Wing)

(GlaStar  
Shown)

## **Pre-Built Fuselage**

- Composite shells fitted, laminated together and fastened to cage.
- External seams filled, primered and sanded.
- Top deck installed.
- All bulkheads installed.

## **Pre-Built Tail**

- Rudder: Complete, less tip.
- Stabilizer: Complete, less tips.
- Elevator: Complete less trim tab and tips.

(GlaStar Shown)

# GlaStar

and

# Sportsman

## Pre-Built

### GlaStar “matched-hole tooling” revolutionized kitplanes.

The GlaStar was introduced in 1995 and was the first kitplane offered with pre-punched aluminum wing skins, spars, ribs and brackets. Not only were all skins pre-punched on precision CNC punch presses, but matched-hole tooling was created for all spar, rib and bracket assembly—a revolutionary concept that some other kit manufacturers have since adopted.

**Now,** Glasair Aviation has taken the ‘quick-build’ concept to new heights with the GlaStar and the Sportsman 2 + 2.

### Very realistic assembly time

One of the most frequent questions asked in the kitplane industry is: “How long does it take to build?” This is a difficult question to answer because there are so many variables involved such as one’s prior building experience, confidence with the use of tools, the number and types of add-ons and options selected, VFR vs. IFR panel, paint and interior choices, etc. Honest manufacturers will give you a range of build times rather than quote you a ridiculously low figure that is simply unachievable for most builders. Keep this in mind in determining how long you think it will take you to complete your project and remember that the time spent on final assembly tasks, such as engine installation, instrument panel, paint and upholstery, are very similar between various types of kitplanes.

With that said, how long does it take to assemble a non-pre-built GlaStar or Sportsman! Our builders, who have completed a relatively stock, VFR, non-Pre-Built GlaStar, are reporting assembly times of between 1500 and 1800 hours. Based upon our experience, customers who purchase all three of the now available Pre-Built options can reduce assembly time by 40 - 50%. Pick only one, or a combination of any two to suit your budget.

### Do GlaStar and Sportsman Pre-BUILTS really meet the 51% rule?

The answer to this question is a resounding yes! The combination of all three Pre-Built options still meets the ‘major portion’ (51%) evaluation of the FAA checklist. We not only accomplished reducing the assembly time by approximately one-half, but more significantly—we **factory finish 80-90% of the structural airframe work to a high standard of quality** and still meet the spirit and intent of the amateur-built rule. For some, it will be a very comforting feeling to tackle the project knowing that much of the structural assembly has been completed by skilled professionals, allowing them to focus on accomplishing the fun, final assembly tasks.

**(Note:** In the Pre-Built photo, the wings, flaps, ailerons and tail surfaces are positioned on the GlaStar fuselage for display purposes. Installation is accomplished by the customer.)

\*Standard Corrosion Protection includes a application of a self etching primer to all interior parts prior to assembly. Epoxy Salt Water Corrosion Protection is available on request.

### Pre-Built Tail Assemblies

Pre-Built tail and wing assemblies are provided with a uniform coat of corrosion protection\* on all inside surfaces and professionally assembled and riveted to the following stages:

**Stabilizer** - Fully assembled, less tips.

**Elevator** - Fully assembled with the exception of the elevator counterweights and tips. Remaining tasks for the builder include trim tab assembly and installation.

**Rudder** - Fully assembled, less tip.

**(Note:** The Pre-Built tail kit requires a separate crate with additional crating charge.)

### Pre-Built Wings

With the optional Pre-Built Wing Installation, the wing and control surfaces come ready to hang on the airplane! Not only is the basic wing structure assembled, but all flight control brackets, bellcranks and pulleys are installed, the leading-edge D-section is complete, and all the lower wing skins, stiffeners and lift-strut beam structures are riveted and bolted in place. The upper skins and stiffeners are match-drilled to the spar/rib structure - you simply rivet them in place after drilling the wing struts, rigging the flight controls and completing the wing fuel tank plumbing and wiring. The ailerons and flaps are complete and ready to hang. Interior surfaces have a uniform coat of corrosion protection. The assembly of Pre-Built wings, flaps and ailerons is accomplished by professional sheet-metal mechanics to high factory standards. This option reduces the assembly time for the average customer by 400-600 hours.

**(Note:** The Pre-Built wing requires a separate crate with an additional crating charge.)

### Pre-Built Fuselage

With the Pre-Built Fuselage, the composite shells are delivered having already been precisely jigged and fitted to the cage, with the dorsal and belly seam laminates in place and the exterior seams filled, primed and sanded. All cage-attach hard points are injected in the shells and all single point cage-to-shell attach hardware is installed. In addition, all bulkheads are prefabricated, and fully installed. The Pre-Built fuselage also includes a high-performance, zero-drag COM antenna bonded into the vertical fin.

All Pre-Built fuselages come with the top deck installed with exterior leading edge and aft seams filled, primed and sanded. Also, the cabin area of the fuselage and top deck are now pre-painted with a lightly-textured, gray Zolatone finish, so as to provide the customer a nice looking, completed interior straight from the factory. This feature provides customers the opportunity to save the weight, cost and difficulty associated with installing unneeded, bulky interior cover panels, and, at the same time, further reduces assembly time.

We estimate the Pre-Built Fuselage option will save the average customer from 150-200 hours or more assembly and finish labor.

**(Note:** The Pre-Built fuselage fits into the standard fuselage crate.)