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# **Companion Guide: “Building Fly Baby” Article 11: Corrections**

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Version 1.0

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and the Fly Baby Community**

This Companion Guide is written to accompany the eleventh of Pete Bowers' Fly Baby construction articles in EAA SPORT AVIATION magazine.

Article 11 is only one page, and consists entirely of corrections to the previous articles. These corrections have already been referenced in the previous Companion Guides. The information is reproduced here to maintain continuity with Pete's original articles.

You will need to download these articles from the EAA Archives. This Companion Guide merely supplies additional background information and some helpful hints on the actual construction. A full Table of Contents is included on the next page.

There are two kinds of figure references in this Companion Guide. If the reference is "Figure 1-1" (with a hyphen), it's a figure in the original EAA articles. Figures without a hyphen are contained in this document and should closely follow the text which refers to them.

For specific assistance in building the components described, see the [Workmanship](#) and [Hardware](#) articles on the PB100 Web Page.

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## 1 OVERVIEW

This Companion Guide merely reproduces corrections to the original articles that were included in the earlier Guides.

Note that this Guide only addresses the corrections Pete made in Article 11. Other changes were incorporated into the later editions of the plans, and other problems have been noted by builders. These other changes are addressed in the appropriate Companion Guide, but are *not* mentioned here.

In short, if you follow the “Errata” sections of the previous Companion Guides, this Guide is not necessary. I debated actually producing this document, but decided to go ahead for the sake of continuity. Just be advised there are OTHER corrections noted in the main Guides.

### 1.1 Note about Illustrations

To make things clearer, I have drawn up a lot of sketches to illustrate some of the aspects of the assembly. Peripheral details on these sketches are just there to complete the drawing—they may not, exactly, match the original Pete Bowers figures. My sketches always are in color; Pete’s are black and white.

Where there is a difference between my sketches and those from the Pete Bowers articles, assume the original article sketches are correct.

If two pieces in my sketches are supposed to be the same size but look different, just assume that was an error.

### 1.2 Workmanship

Let’s review the [Basic Workmanship](#) rules for building Fly Babies. Key notes:

- Do not varnish any areas which will subsequently be glued
- Varnish any closed areas (double-plywooded forward section, etc.) before they are closed up.
- Drill holes in wood directly to size, using a brad-point drill bit
- Varnish all bolt holes
- Varnish all areas where metal parts will be in contact with the wood
- All metal components should be painted or otherwise protected.

## **2 ERRATA**

There are no corrections to be made to Article 11...which is ALL corrections, anyway.

**3 SAFETY ISSUES**

No safety issues related to the Corrections article.

#### 4 CONSTRUCTION DETAILS

Again, the information below is reproduced from earlier Companion Guides. If you've followed the instructions in those previous Guides, these should already be accomplished.

These are presented in the same sequence as Article 11. All of Pete's corrections involve figures, so the headings below correspond to the figure that is mentioned.

##### 4.1 Figure 1-1: Fuselage Dimension Corrections

Pete had a bad day when he specified some key fuselage dimensions.

Figure 1 shows the dimensional corrections at the heart of the error. Basically, the "slant" of the vertical sides of Stations 3 and 5 are wrong. This affected the wing angle of incidence. In Part 11, Pete shows special wing spar fittings to correct the problem, but these won't be needed if the plane is built per Figure 1 below,

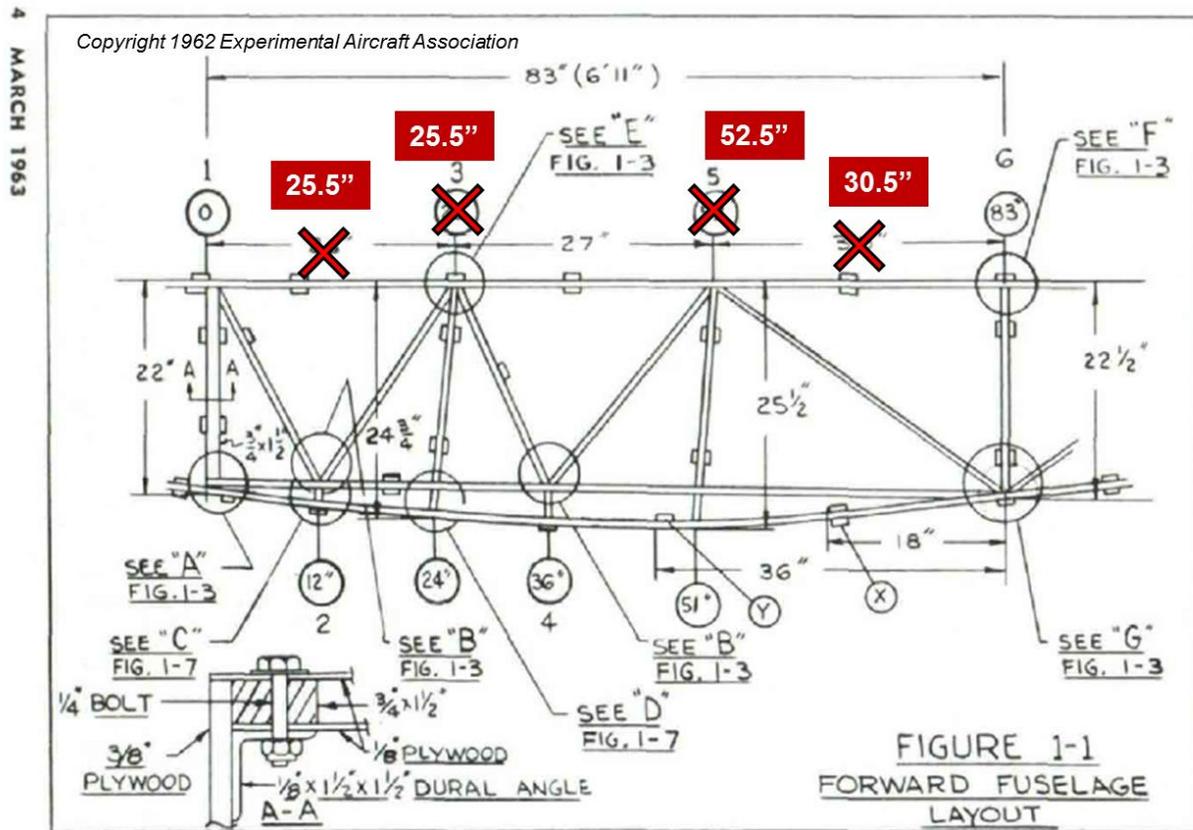
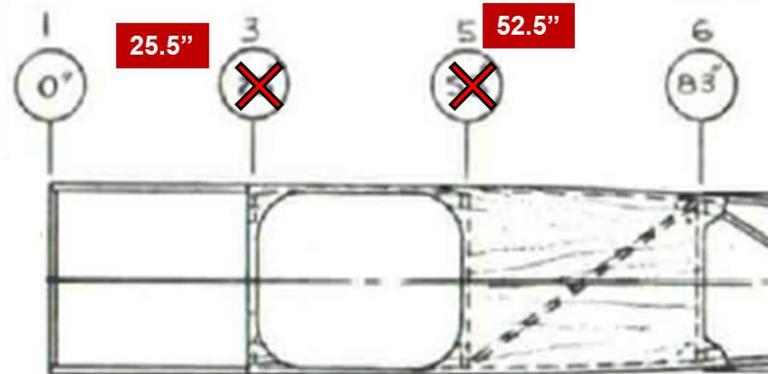


Figure 1: Figure 1-1 Corrections

Pete doesn't mention it, but Figure 1-8 also has to reflect the same changes; the 26" shown at Station 3 of the top truss only is actually 25.5", and the 53" at station 5 is actually 52.5". See Figure 2.



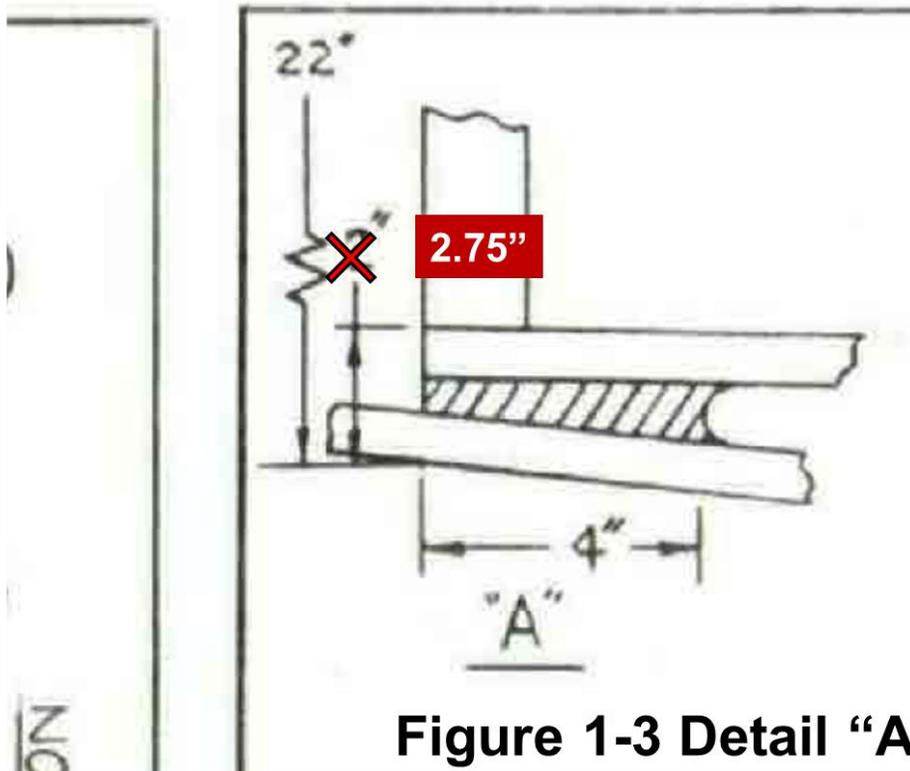
Copyright 1962 Experimental Aircraft Association

Figure 2: Figure 1-8 Corrections are the Same as Figure 1-1

#### 4.2 Figure 1-3: Fuselage Longeron Relationship

Figure 1-3 is on Page 5. In the upper left corner of Figure 1-3 is Detail "A". It shows a 2-inch dimension; this should be 2.75" instead. This is shown in Figure 3.

*Experimental Aircraft Association*



**Figure 1-3 Detail "A"**

Figure 3: Figure 1-3 Detail "A" Correction

**4.3 Figure 2-5: Axle Length**

There's only one major error in Article 5, but it's a doozy.

On Page 7 of Article 5, look just above the drawing of the shackle and clevis pin at the lower left of Figure 2-5. It shows a dimension for the length of the axle.

It says 6' 1"...six feet one inch. It should ACTUALLY say, 61 inches.

I once saw a Fly Baby built with the 73-inch axle. It wasn't a pretty sight.

So remember: The axle is 61 inches long.

**4.4 Figure 4-3: Spar Plates**

Article 11 includes three drawings of reworked rear spar fittings, reproduced below as Figure 4. If you've incorporated the errata in earlier Companion Guides, the only one you should do is the top illustration. This merely makes it easier to insert the wings.

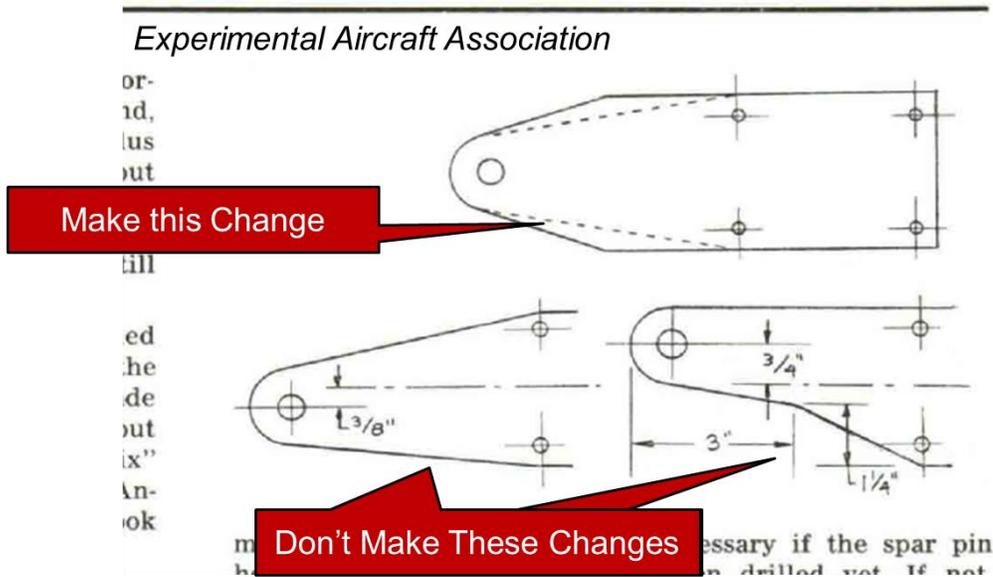


Figure 4: Spar Fitting Alterations

The corrected fittings, on the lower part of this figure, should only be made if you did NOT correct the fuselage dimensions in Companion Guide #3.

**4.5 Figure 4-4: Compression Rib Lengths**

In Figure 4-4 on page 23 of Article 1, there is a list of the lengths of the compression ribs. "C4" is erroneously listed as 25 and 3/16ths inches. According to Pete, the correct dimension is 25 and 13/16 inches.

Compression Rib	Face Length
C1 and C3	26 and 1/4 inch. (26.25 inches)
C2	25 inches
C4	25 and 13/16 inches (25.8125 inches)

Companion Guide #1, Section 4.3, discusses other issues associated with compression rib sizing.