

TOTAL PERFORMANCE
VAN'S AIRCRAFT

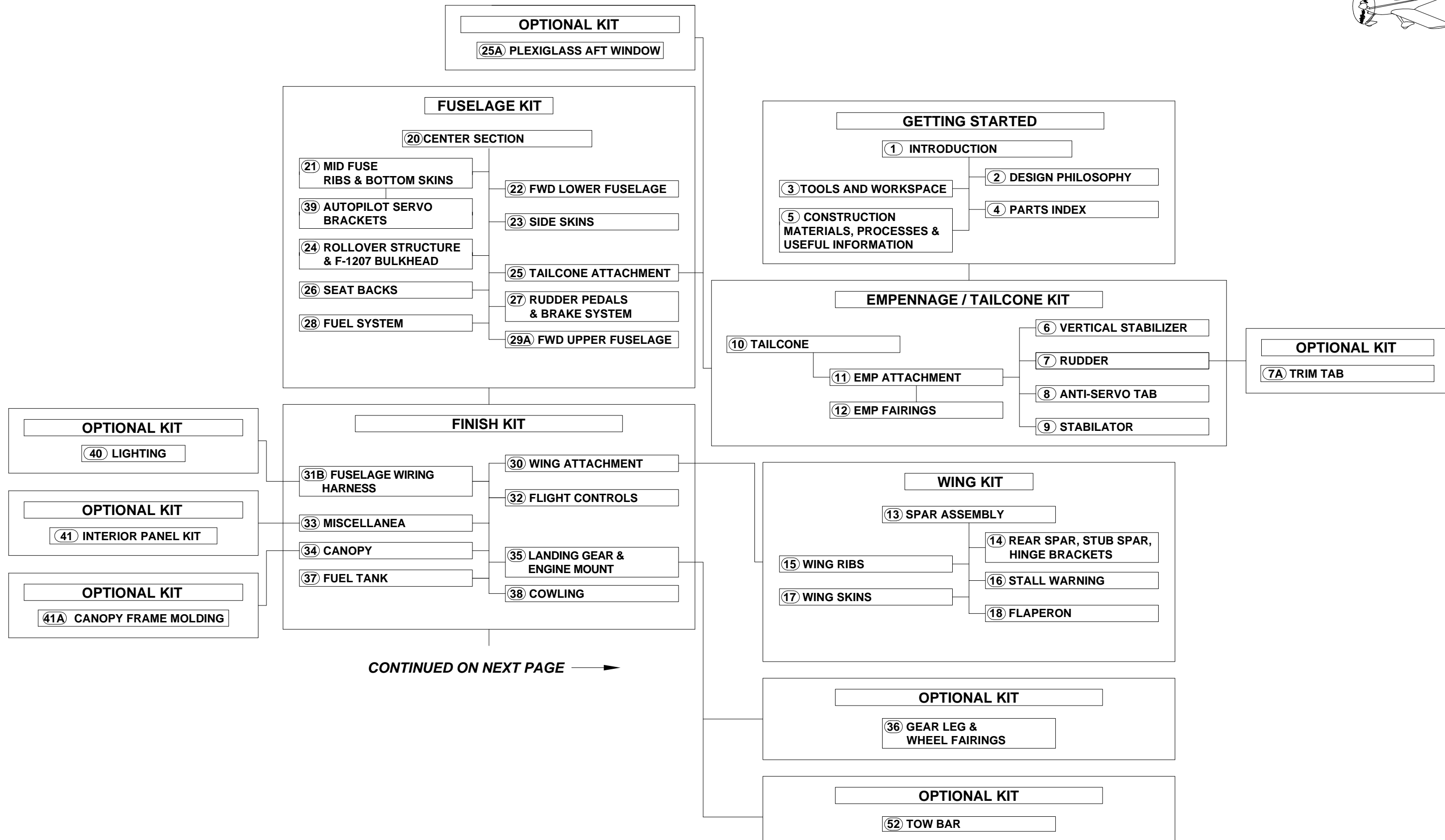
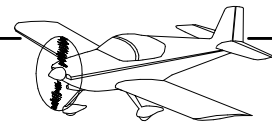
14401 Keil Road NE, Aurora, Oregon, USA 97002

PHONE 503-678-6545 • FAX 503-678-6560 • www.vansaircraft.com • info@vansaircraft.com

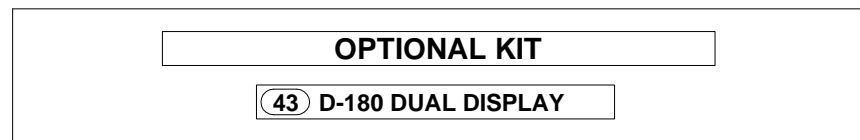
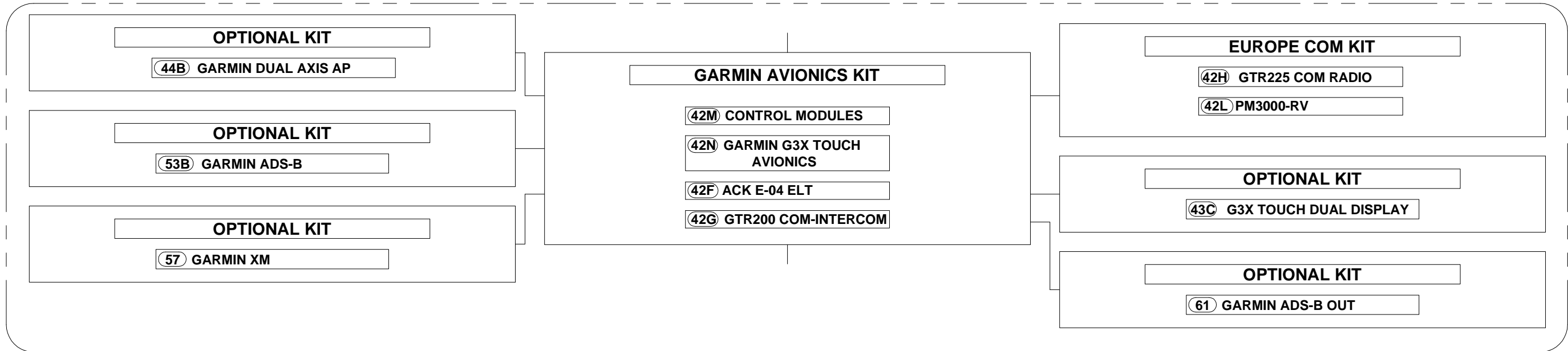
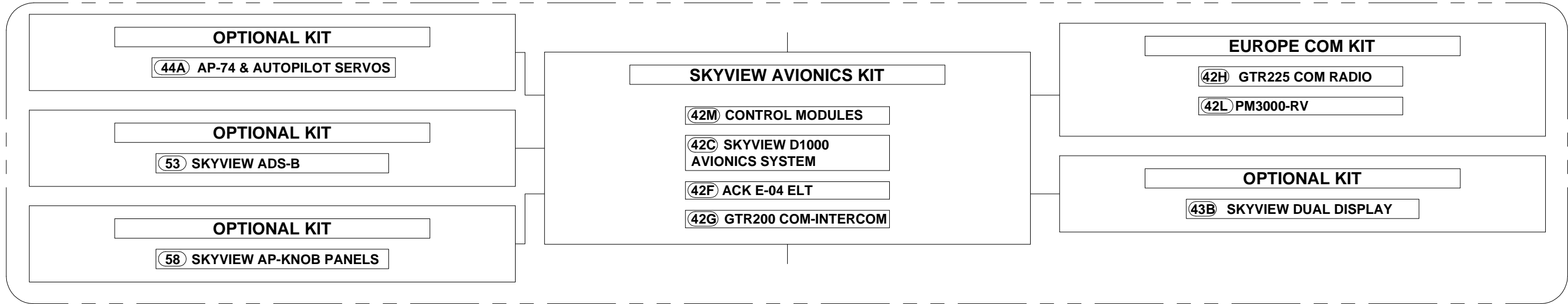
Service Letters and Bulletins: www.vansaircraft.com/public/service.htm

DOCUMENTATION INVOLVED:

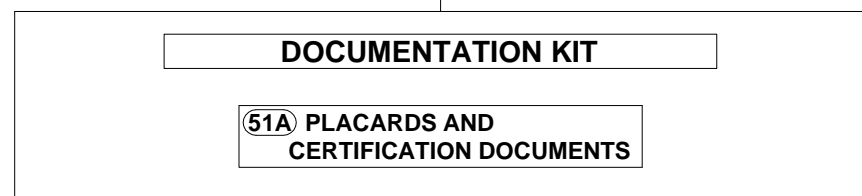
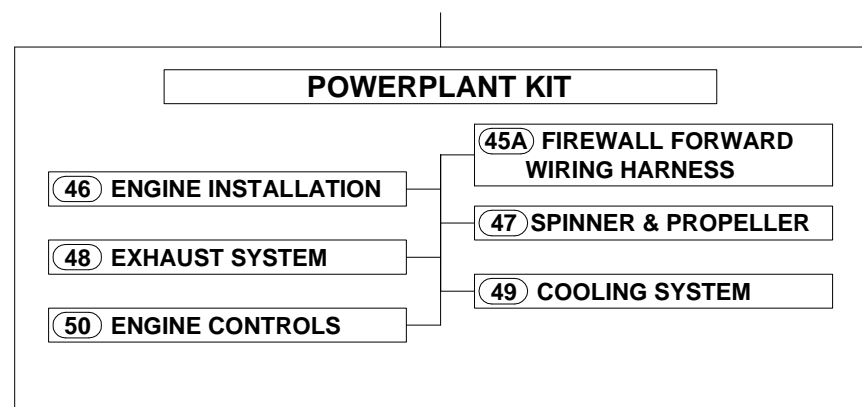
Page 01-02 Rev 11: “61 GARMIN ADS-B OUT” was “61 GARMIN GPS (ADS-B OUT)”.

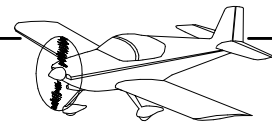


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NOTE:
 AFTER ALL OF THE KITS HAVE BEEN RECEIVED,
 CONTACT VAN'S AIRCRAFT TO REQUEST
 INFORMATION FOR REGISTERING AND
 LICENSING THE AIRCRAFT.





SECTION 1: INTRODUCTION

INTRODUCTION

Welcome to the wonderful world of homebuilt aircraft. The project you are about to undertake (assuming that this is your first homebuilt airplane) will probably be the most frustrating, time-consuming, enjoyable, fulfilling, and rewarding that you have ever experienced. The ultimate success of this project is determined by many factors, the most important of which only you control. These include your skills, patience, willingness to learn, willingness to seek help when necessary, and a firm desire to create for yourself a very special personal airplane.

The Federal Aviation Administration (FAA) allows us to build and fly experimental aircraft for the purpose of education and recreation. The education part is up to you. This instruction manual has been compiled to help you achieve your goal. Though we have made it as detailed and instructive as we feel is practical, it does not supply everything you need to know to complete an RV-12. These instructions tell you specifically how to build an RV-12, and presuppose that you already know (or will learn) the basics of aluminum aircraft construction. To assist your education, we have included a copy of the *Standard Aircraft Handbook* in your kit. Additionally, we have listed several other books and manuals that are helpful in this regard.

Additional help during construction can be had by becoming a member of the Experimental Aircraft Association (EAA), reading their *Sport Aviation* and *Sport Pilot* magazines, and most of all, by being an active member of one of their 600+ chapters. Associating with other homebuilders, particularly RV builders, can be extremely helpful and can even make the difference between success and failure of your project. It can provide actual building assistance, technical knowledge, and moral support.

In many places RV builders have formed their own organizations, often modeled on EAA chapters. They publish newsletters, hold regular meetings, and exchange techniques, information & tools. We have been highly impressed by the craftsmanship and camaraderie demonstrated by these Builders Groups and encourage any RV builder to join or form one whenever possible. (A list of Builders Groups and contact persons is available by contacting Van's Aircraft or by visiting <http://www.vansaircraft.com/public/builders-groups.htm>) Building an airplane is a big undertaking, and a builder should never be too proud or individualistic to take advantage of what others have to offer. It is a rare person who is so skilled that he/she cannot benefit from others.

VAN'S BUILDER ASSISTANCE

Van's offers builders assistance on the telephone between the hours of 7:00 am to 9:00 am and 3:30 pm to 4:30 pm Pacific Time. You can also e-mail us at support@vansaircraft.com. Please, for speedier answers when you call, have your builders manual with you and be ready with your 6-digit customer/builder number. When e-mailing questions please be sure to say that you are building an RV-12 and to specify the manual page(s) you are referencing.

A WORD ABOUT THE BUILDERS MANUAL

When the kits are shipped, they have the latest revision of the builders manual. The builders manual matches the parts as shipped. Over time, we make changes, corrections and improvements to the builders manual. There is no need to request newer versions. New drawings may not match the parts that you have.

Van's has decided that our website (www.vansaircraft.com) will be the mechanism for putting necessary revisions into the hands of builders, therefore it is essential that all RV-12 builders have access to a computer with an internet connection and an email account. The cost to builders should be minimal, as public access computers in libraries may be used, with a free gmail or hotmail account. These are essential for downloading manual revisions and are the primary means (with the Van's website) for us to stay in contact with RV-12 builders. Paper manual revisions will not be mailed out in order to reduce costs and maintain kit affordability. Most builders will also want a computer/internet access to become part of the online RV community.

Here's how our revision system works:

Change Memos: note changes to the build process or insignificant spelling/wording changes that do not in any way alter the configuration of the finished aircraft. Memo changes will NOT show a revision level change in the title block but will show a change to the revision date.

Change Notices: note dimensional changes, change of parts/hardware, or any additional instructions or changes to the build process which result in a change in the configuration of the finished aircraft. Notice changes WILL show a revision level change in the title block as well as a date change.

As a builder, it is up to you to check our website frequently.

When you find a builders manual page with a later date or higher revision number than the one you have...

IF it shows a portion of construction you have not reached...
THEN simply print-out the new page and destroy the old one.

IF it shows a portion of construction you have already accomplished...
THEN there is NO NEED to re-do any step of construction to conform with a revision.

In any situation, there is NO NEED to keep track of exactly what changed.

Service Bulletins: will be issued if, for some reason, an already accomplished step must be re-done. The service bulletin will detail the steps that must be re-done along with any parts or hardware necessary to accomplish the required change. If/when a service bulletin is issued, we will contact all affected builders as well as post the service bulletin on our website and publish it in the *RVator* (available as a free download at vansaircraft.com). Given the potential need for us to contact you, the builder, it is important to keep Van's Aircraft informed as to your current e-mail address and mailing address.

The builders manual not only guides you through the assembly process but also defines the exact configuration of your particular aircraft. For this reason the builders manual is considered a part of the aircraft documentation package and should remain with the aircraft if/when ownership is changed.

HELPFUL BOOKS AND MANUALS

AIRCRAFT SHEET METAL CONSTRUCTION AND REPAIR

Sources for some or all of these include:

SHEET METAL, Vol. #1

Van's Aircraft, Inc.

THE SPORTPLANE BUILDER

Robert L. Nuckolls III (The Aeroelectric Connection)
6936 Bainbridge Rd
Wichita, KS 67226
316-685-8671

FIREWALL FORWARD

SPORTPLANE CONSTRUCTION TECHNIQUES

Builder's Bookstore
PO Box 270
Tabernash, CO 80489
970-887-2207
www.buildersbooks.com

THE AEROELECTRIC CONNECTION (A great source for wiring information)

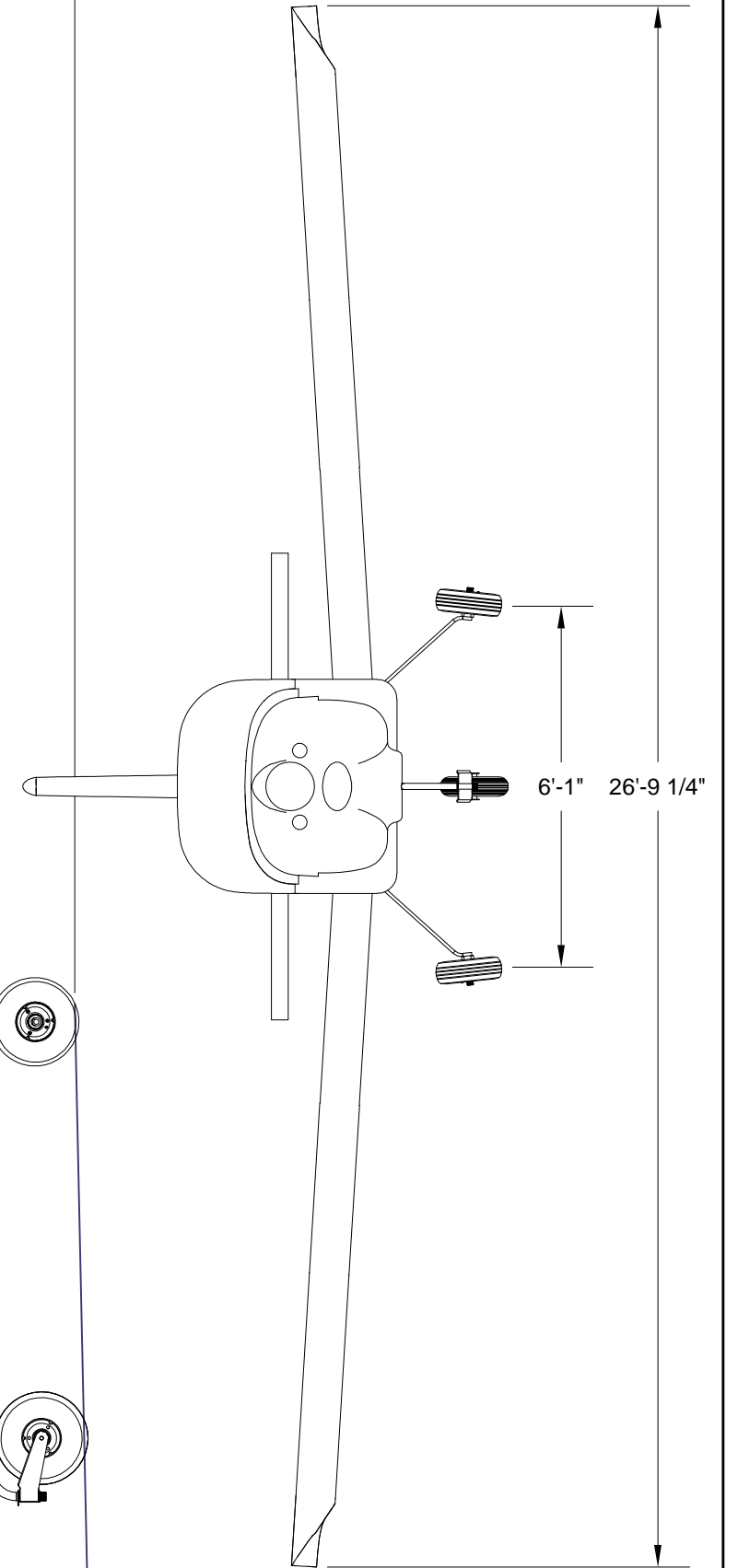
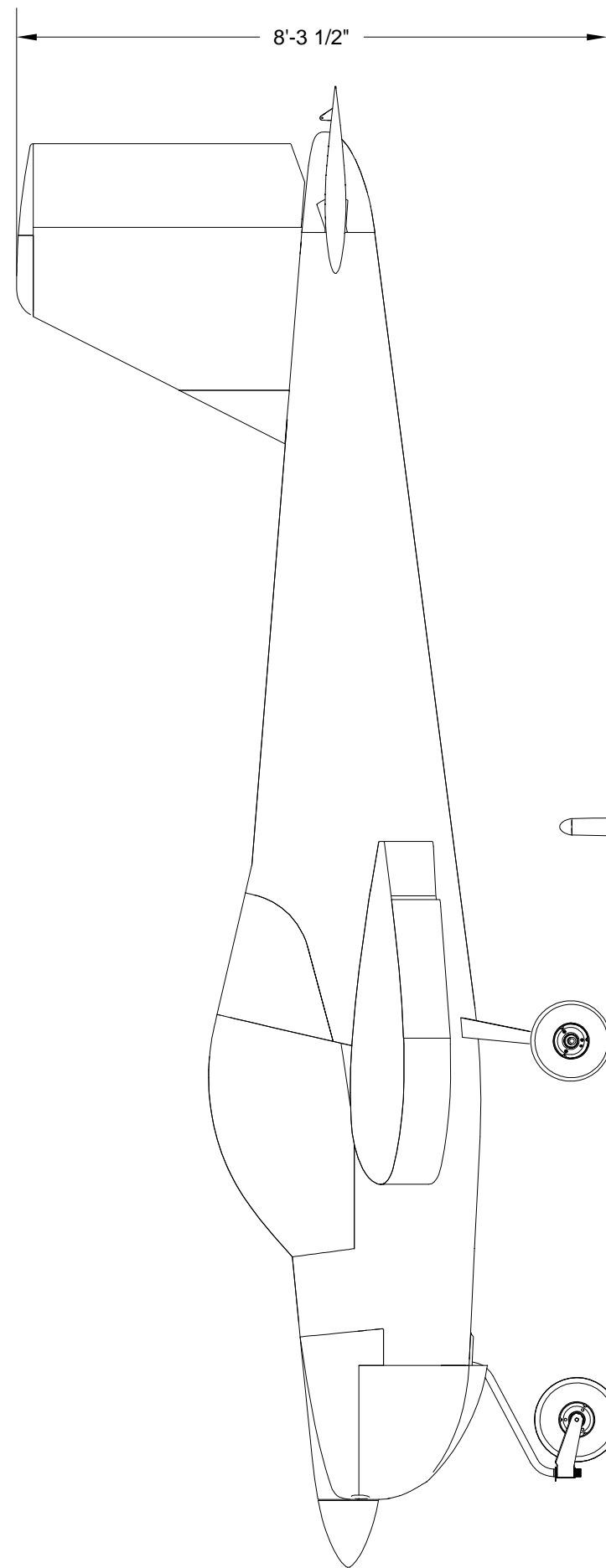
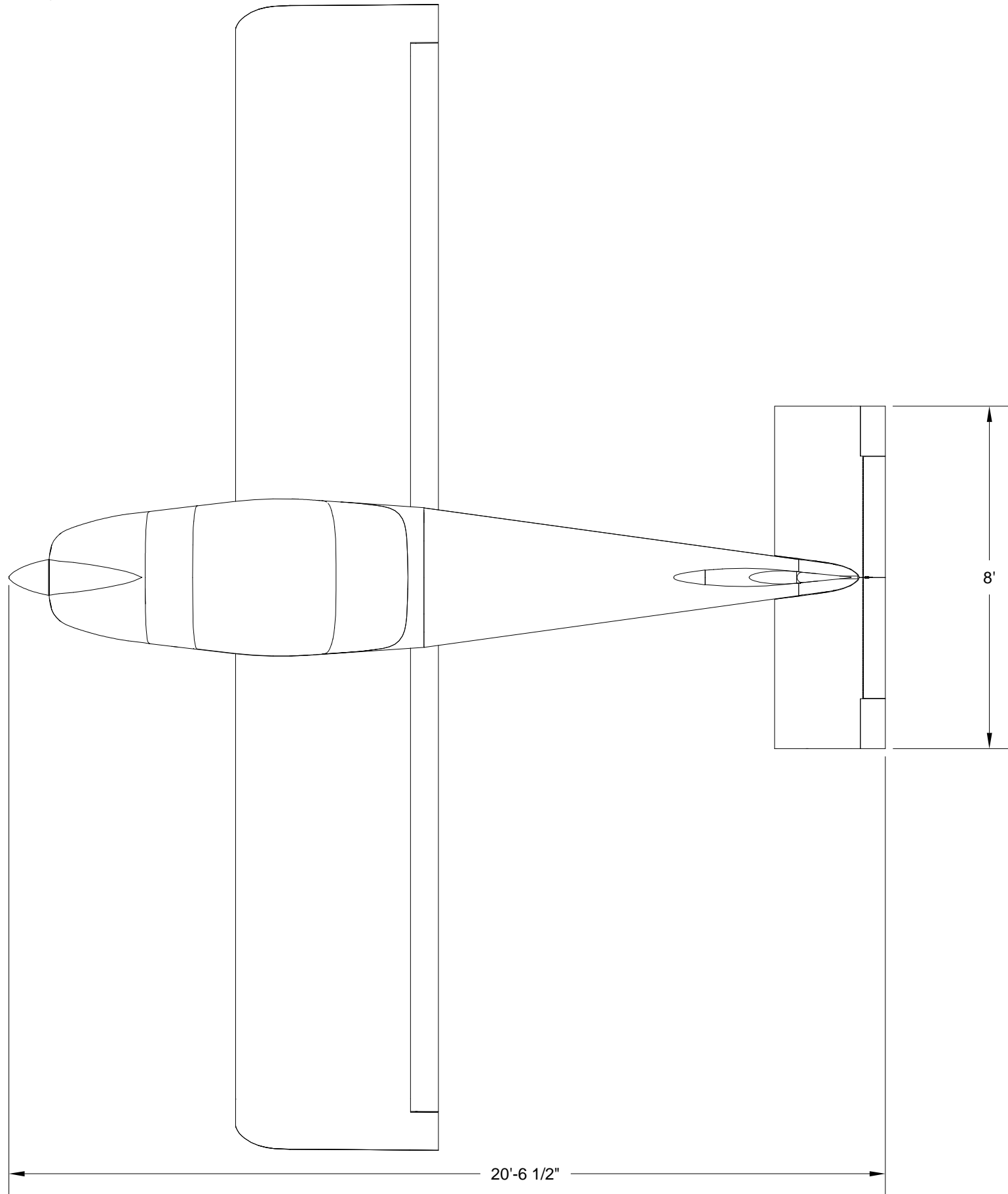
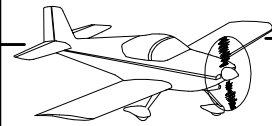
BUILDING THE METAL AIRPLANE

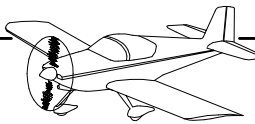
Avery Enterprises
411 Aviator Drive
Ft. Worth TX 76179
phone: 817-439-8400
800-652-8379
fax: 817-439-8402
www.averytools.com

LIGHT AIRPLANE CONSTRUCTION

FAA ADVISORY CIRCULAR 43.13

Experimental Aircraft Association
PO Box 3086
Oshkosh WI 54903-3086
www.eaa.org



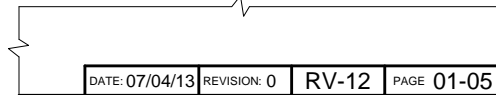


Builder Feedback Form

Name: _____ Date: _____
Customer Number: _____
Phone Number: _____

Information from Manual Page Title Block:

Date: _____
Revision: _____
Aircraft: _____
Page No: _____



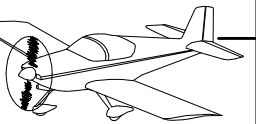
Example Title Block:

Step Number(s): _____ (if applicable)
Figure Number(s): _____ (if applicable)

Please describe the issue in the space provided below, then mail to:

Van's Aircraft Inc.
14401 Keil Road NE
Aurora, OR 97002 USA

NOTE: This form may be accessed online at our website: www.vansaircraft.com. Click on the Support tab and select Downloads. Or by visiting: <http://www.vansaircraft.com/public/downloads.htm>. If you prefer to email please include the same information needed to complete this form. Send to: support@vansaircraft.com.

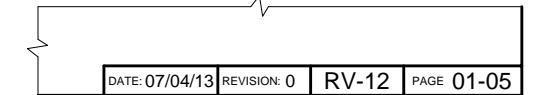


Builder Feedback Form

Name: _____ Date: _____
Customer Number: _____
Phone Number: _____

Information from Manual Page Title Block:

Date: _____
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Example Title Block:

Step Number(s): _____ (if applicable)
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14401 Keil Road NE
Aurora, OR 97002 USA

NOTE: This form may be accessed online at our website: www.vansaircraft.com. Click on the Support tab and select Downloads. Or by visiting: <http://www.vansaircraft.com/public/downloads.htm>. If you prefer to email please include the same information needed to complete this form. Send to: support@vansaircraft.com.



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