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Message From Headquarters

Joe Norris, EAA Homebuilders Community Manager

It’s winter in Wisconsin, and this has been one of the meanest winters we’ve seen in some time. It has been alternating between very cold and very snowy, and the wind has been blowing hard the whole time. Not very conducive to flying, but good weather for building! I’ve visited several projects lately, so it looks like everyone has moved from the airport to the shop around these parts.

We have a new “found in the field” article in this issue that points out some common problems that continue to show up. As you Technical Counselors go about your project visits, keep these items in mind. We continually come in contact with new builders who have not been exposed to all the little things we take for granted, so be ready to pass along even the most basic knowledge and answer simple questions. These new builders are sponges for info and will

51% Rule Public Comments

The FAA received thousands of comments in response to the proposed changes to the amateur-built certification policy. Many people have expressed interest in reading these comments, and now you can!

The comments are posted under docket numbers 2008-0797 and 2008-0823.

really appreciate your advice and encouragement.

The FAA is still considering their proposed changes to amateur-built certification policy. There will be a meeting at FAA headquarters in Washington, DC to discuss the issue on the 27th through the 29th of January. EAA representatives are included in this meeting, as well as representatives of the amateur-built kit industry. Hopefully we will know more details of the new policy soon. Keep watching the EAA web site and publications for updates.

As always, we appreciate any input, articles, comments or questions you might care to pass along. This newsletter will be much more interesting and informative if you all contribute. Send your submissions to SafetyPrograms@eaa.org or mail them to me at EAA headquarters.

Go to www.regulations.gov/search/index.jsp and search those docket numbers. You’ll be presented with several volumes of comments in each docket. You’ll need Adobe Acrobat Reader in order to open the volumes and read the comments.

Happy reading!

Amateur-Built Survey

Some of you may have received a notice inviting you to participate in a survey regarding amateur-built aircraft handling characteristics. This survey was initiated by the FAA and was facilitated by EAA in an effort to identify areas where pilots have experienced unusual or surprising behavior in their homebuilt aircraft. Data gathered from this survey will help to identify areas where efforts can be made to improve safety.

This was an “invitation only” electronic survey based on a list of email addresses provided by the FAA. About 5000 survey requests were sent out, and to date over one third of the recipients have responded. The data is still being compiled, but we’ve already been able to verify many things that we’ve surmised

for quite some time. For example, most respondents hold private pilot certificates with airplane single engine land ratings. Most have flown their homebuilts less than 25 hours in the last 90 days.

About 25 percent of the respondents built their aircraft from plans, while the rest were built from kits. A small percentage of the respondents bought already-flying homebuilts. Almost half of these homebuilts are tailwheel aircraft, but only about 25 percent of the total are high performance or complex. Most – about 97% - are piston powered.

Once we have time to dig deeper into the data provided by the respondents we’ll have more to report. Keep watching EAA publications for future articles.

Lancair Owners Form Group

The Lancair Owners and Builders Group (LOBO) has recently been formed in order to address a number of issues important to the Lancair community. The group’s headquarters is their website – www.lancairowners.com. The website lists the following mission statement:

The Lancair Owners and Builders Organization (LOBO) promotes the safe use and enjoyment of Lancair aircraft through education, training and fellowship. Additionally, LOBO safeguards and furthers its members' interests with regulatory agencies, the general aviation community and the public at large.

The website goes on to say this about LOBO:

LOBO is the vision of a group of Lancair enthusiasts who strongly believe in the need for a united Lancair community. LOBO's directors see many challenges in the current general aviation flying environment. Continuing safety concerns, rumors of looming regulatory action and a dwindling list of service and support suppliers are but a few of

the issues affecting the continued safe enjoyment of these fine aircraft. LOBO intends to be your one-stop-shop for all things Lancair. We see our primary mission as that of promoting the safe use and enjoyment of Lancair aircraft of all types, with an emphasis on owner, operator and builder education and training. In pursuit of this mission, LOBO will build partnerships to enhance communication and cooperation between its members, Lancair International Inc., aviation training and insurance providers, manufacturers and suppliers of aircraft building, operating and maintenance equipment supporting Lancair aircraft, US and international regulatory agencies and the wider general aviation community.

If any of you are working with Lancair builders or owners you may want to make them aware of this group. LOBO can be contacted via email at info@lancairowners.com or by mail at:

Lancair Owners and Builders Organization
18437 Edison Ave
Chesterfield, MO 63005

Why is it Called “B” Nut?

I’m sure many of you have heard, and maybe used, the term “B Nut” when referring to an AN818 fitting. The question of why it’s called a “B Nut” might have even crossed your mind. Well, here’s the story.

The term “B Nut” goes back to the early days of standardization of aviation hardware for the military. For tubing and plumbing, the terminology that was adopted came from the leading supplier of aviation products at the time, the Parker Appliance Company. Parker published a book called “Maintenance of Aircraft Tubing Systems”. I’m not sure when the first edition of this book was published, but I am aware of a “second edition” that was published in 1939, and the copy we have in the EAA library was published in 1943.

There is a section of this book titled “Flared Tubing Fittings”. It is in this section that references to a “B Nut” are found. It is interesting to note that the AN818 coupling fitting commonly referred to these days as a “B Nut” is not actually a “B Nut”. It is actually a “BT Nut”. The AN819 sleeve that is used with the AN818 coupling is a “T Sleeve”.

There is a “B Nut” mentioned in the book, and it is also used for flared fittings. However, the “B Nut” is a male thread nut that is made to be used in a matching female thread receptacle. This combination was called the “AC810 series fitting” and to my knowledge was not included when the move was made to the “AN” series fittings that we know today. The “BT Nut” and “T Sleeve” that became the

AN818 and AN819 fittings we use today were referred to as the AC811 series in the Parker book. In the 1943 edition of the book, the AC810 series (including the “B Nut”) is referred to as “obsolete”.

Whether you call it a “B Nut” or an AN818 fitting, you need to make sure to use the proper torque when tightening it. Use this table as a guide and pass this info along to builders when you make your Technical Counselor visits. Info on proper tightening torque may also be found in AC 43.13 and in the Standard Aircraft Handbook.

Torque Specification Guidelines		
Nut Size	Minimum Torque ¹	Maximum Torque ¹
-02	50	80
-03	70	105
-04	100	140
-05	130	180
-06	150	195
-08	270	350
-10	360	430
-12	460	550
-16	700	840
-20	850	1020
-24	900	1080
-32	1800	2000

¹Torque values are shown in inch pounds for aluminum fittings.

Found in the Field

The following is an excerpt from an article published in EAA Chapter 818’s newsletter. While this article speaks specifically about new production Light-Sport Aircraft (SLSA) it serves as a good reminder to Technical Counselors who are visiting members’ projects...

At the recent Chapter 818 meeting our program featured a local FBO talking about maintenance services they are able to provide to owners of Experimental aircraft and LSA. A question was asked regarding what maintenance problems had been encountered with the new LSAs that are becoming more common on the flight line. The FBO reported that numerous cases had been found where wiring and tubing were not satisfactorily located or secured in the engine compartment to prevent chafing, and wires or tubes/hoses passing through holes in composite panels were left unprotected for chafing. Avoiding loss of elec-

trical system function through broken wires or short circuits and the potential for fires or loss of fuel due to fuel leaks suggest the importance of careful inspection of new or in-service aircraft beyond normal preflight inspections. The use of clamps and standoffs in the engine compartment to protect wires and tubes and the appropriate use of rubber grommets to protect wires and tubes running through panels was noted as being good maintenance practice. It was suggested that, when dealing with factory-built SLSA, this should not constitute a modification to the manufacturer’s design needing approval by the aircraft manufacturer. The speaker noted that maintenance problems that were detected on SLSA were readily received by the various manufacturers who were agreeable to appropriate fixes if they hadn’t already identified the problem/fix.



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EXPERIMENTER

EAA's **HOMEBUILDERS** e-NEWSLETTER



HOMEBUILDERS

Those of you who have an email address on file with EAA should have received the premier issue of *Experimenter*, EAA's new e-newsletter specifically for the homebuilder/restorer/craftsman members of EAA. *Experimenter* will be sent out on the third Tuesday of each month, but in order to continue to receive it you have to subscribe. If you haven't subscribed already, go to www.eaa.org/subscribe and sign up! You can also view *Experimenter* online at www.eaa.org/experimenter.

Response to the newsletter has been enthusiastic to say the least. Over 19,000 EAA members have already subscribed, and I'm sure we'll continue to add subscribers as time goes on. Encourage your

fellow EAA members to subscribe to *Experimenter*, and don't forget to mention the newsletter during your Technical Counselor and Flight Advisor sessions.

You should also keep an eye out for interesting projects and builders that might make a good article for *Experimenter*. You might even consider writing something yourself! EAA has always been about "members helping members" and *Experimenter* is another way we can help each other. Let us know if you come across something interesting or educational that you'd like to share with your fellow EAA members. You can email articles or ideas to experimenter@eaa.org.