

Workshop Practice
Author's Note to the Plywood Discussions in the Addendum
of the Second Printing

Subsequent to the first printing of *Workshop Practice* It became clear that it would be beneficial to include more information on plywood in the Addendum, since GL-graded plywood is not as widely available as it previously was. I contacted individuals in Germany, the UK, and the US to obtain their opinions on what information should be included. Subsequently, I wrote and confirmed with these individuals the following five paragraphs, which replace the single paragraph on page 357 in the 2016 printing:

Neal Pfeiffer 2020.

Thin birch plywood is typically utilized in vintage and classic European gliders while thicker marine fir plywood may be found in many homebuilt US gliders. This reflects the regional availability of wood products during the time that wood aircraft were regularly being built. German gliders typically used birch plywood manufactured to DIN specifications contained in the BVS (see Chapter 5 Production Documents, page 187). The evaluation of physical properties of individual plywood sheets are carried out by Germanischer Lloyd using the procedures they defined for the grades GL-1 and GL-2, which is analogous to Type 1 and Type 2 from the BVS (as discussed on page 70 of this book). In 2013, Germanischer Lloyd (Germany) merged with Det Norske Veritas (Norway) to form a corporation named DNV GL.

In the UK, owners in the home and kit build aircraft market had concerns on the cost and availability of GL plywood, so an alternate standard, "Grade A" was developed and approved by the Light Aircraft Association (LAA), and it is similar to GL-1. "Grade A" is acceptable to the LAA for aircraft built and repaired within the UK under LAA guidance. It is also acceptable to the BGA (British Glider Association) for repair of gliders where GL-1 has not been specifically required.

At the time of printing, GL plywood is available in Germany through the Plandienst Company and Siebert Luftfahrtbedarf. "Grade A" plywood is available in the UK from the Swindon Aircraft Timber Company (SATCo) and The Light Aircraft Company (TLAC). Other suppliers may exist, and one would expect the list would vary over time.

The majority of thin birch plywood is supplied from Finland for commercial use. These plywood sheets are fabricated from the same basic veneers and often the same glue as for aircraft use; however, they have not undergone the testing that certifies they meet the GL or LAA specifications. While the face sheets may be of excellent quality, there could be small defects with the internal layers. One should endeavor to use official GL- or "Grade A"-certified plywood for all repair projects. However, if one cannot readily obtain this material, commercial plywood should only be considered if one has the means to carefully inspect and test it by the methods described in Chapter 4, Testing of Plywood on pages 70-71.

These comments are intended to provide a basic level of information for plywood. Remember that any material selection and repair should be done in consultation with the rules and guidance of the local certification authority, and with oversight by an approved inspector.