Tool Review

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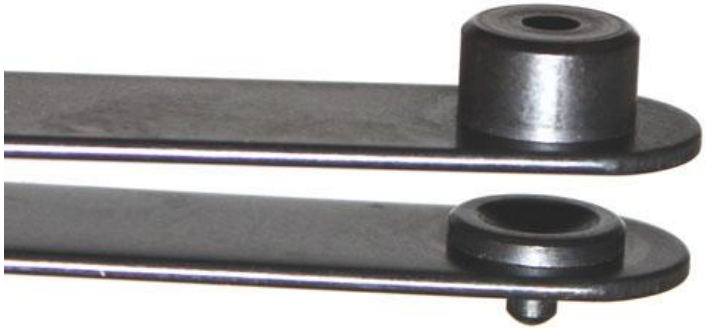
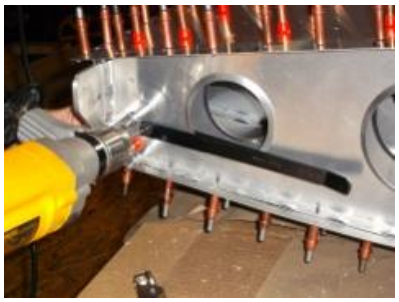
When I was in the US Navy, a friend was in charge of P3 Orion refubishment. He took me on a tour of the shop one day, showed me how the aircraft were rebuilt, and in doing so showed me a tool that was used often. I had no idea how handy that tool would be many years later when building a Sonex.

The tool is known as a "Strap Duplicator" or "Hole Duplicator." It is two bands of steel with a bushing and either a hole or punch. When you are working with a blind hole, where the pilot hole is located under another sheet (such as the wing skin or root rib), this tool can be a minor miracle.



It allows an accurate hole to be drilled or marked when the pilot hole is blind, or under another sheet.I used it on my wing in two locations - the aileron bellcrank support and the root ribs. While building one of my wings, I failed to pilot drill the aileron bell crank support brackets to the wing skin when the wing was open. I could have disassembled part of the wing in order to do the pilot drilling, but using the strap duplicator allowed me to accurately pilot drill the holes with minimal effort and no damage.



The strap duplicator is typically made in two versions - inverted or standard, and is available with a hole for drilling or a punch for marking the location of the hole. While hard to describe, these photos may be more useful in understanding how the tool is useful. The standard and inverted versions allow for using the tool on opposite sides of the sheet. The punch version is used to mark the hole as opposed to drilling it.

Widely available, a complete set is useful - but I was able to get by with four basic strap duplicators - one each standard and inverted, sized for #30 and #40 holes each. I also purchased a longer version for use as they come in various lengths.

When I researched prices online in May 2013, the tool ranged from about $6 each to $10 each, depending on the source, type purchased, and the length.

The EAA Homebuilt Hints video series covers this tool in the following video:

http://www.eaavideo.org/video.aspx?v=1844687105