REPITCHING A PECK POLYMER GRAY PROP

By George White

The May 18, 2010 issue of the Wichita Historical Aircraft Modelers Newsletter, Jeff Englert, Editor, published an article describing how Bill Schmitt repitches those pesky low pitch Peck Gray props. The idea looks like a winner.

Here’s what Bill said:

A plastic is said to cold flow when it does not return to its original dimensions after application of stress. Although plastics are relatively resilient and elastic in comparison with metals, they vary considerably in their resiliency, depending on material and filler content. The ability of plastics to return to their original form varies with the degree of stress, elapsed time under stress, and environmental conditions. There is usually an increment of non-recoverable deformation which still exists after immediate partial recovery and further long-term memory.

Bill's secret method for re-pitching Peck plastic props is revealed in the above definitions. He utilizes the setup below, which he drew, to slowly deform the blade angle to his desired pitch. After a couple of weeks, check the pitch and if need be, return the prop to the notch for more time.