

Carving Log of Larry Parks

Created During the Hand Carving
of the Reproduction 1903 Wright Propeller
December 2000
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05 Dec 2000 Elapsed time: 3 hours - Evening

Transferred the "bow tie" lines from Dave's drawing to the prop blank on both the leading and trailing edge boards. Started double-checking the dimensions, but will have to finish the check next time. Briefly discussed with Ken the idea of using a hatchet to rough out part of the "bow tie", and he was not opposed. He will research this further, to verify his impression that the Wrights "went at the prop with a hatchet and a drawknife".

08 Dec 2000 Elapsed time: 4 hours

Worked blade 1 leading edge to line using drawknife, cabinet scraper (these two tools were used near the inboard break line), 603C and 608 Bedrock Planes and wooden jackplane.

09 Dec 2000 Elapsed time: 5 1/2 hours

Worked blade 2 leading edge to line using same tools as before, and roughed out blade 1 trailing edge using wooden jackplane.

18 Dec 2000 Elapsed time: 10 hours

Sharpened tools; spokeshave and jackplane. Worked 2nd blade concave side to fit supporting templates in preparation to working convex side to final templates. The supporting templates fit the prop only approximately, and are used on the bottom side to support the blade while work is done on the top side. There are four concave supporting templates, and four convex.

22 Dec 2000 Elapsed time: 9 hours

Cleaned up leading and trailing edges with a smooth plane and a spokeshave. Finished roughing out hub on both convex sides, but may want to remove some more from the hub area. This area is difficult to measure accurately, but needs to be matched symmetrically.

23 Dec 2000 Elapsed time: 8 hours

Decided with Mic to use the longer radius of the template on the leading edge, in the manner of the 1904 prop in the shop, and as seen in the photos of the 1903 (although it was not as clear in the photos). Used a coping saw to cut the tips, with a bag of lead shot on top of the blade near the tip pressing the blade into a large piece of foam rubber. This kept the tip from vibrating with the saw.

Mic suspended the prop on the balance tool, and the prop required 6 pennies on blade 1 to balance. We gradually worked both sides of blade 2 down to balance the prop. The tools used were a bench plane, spokeshave, and cabinet scraper, and sandpaper blocks.

25 Dec 2000

Ken laid on one coat of lacquer with aluminum powder, per the original. He said that he had put two coats on the 1904 prop, and that it was too much. One coat was more like the original. With lacquer, each subsequent coat partially dissolves the previous coat, so it is hard to tell how many coats the Wright brothers used.