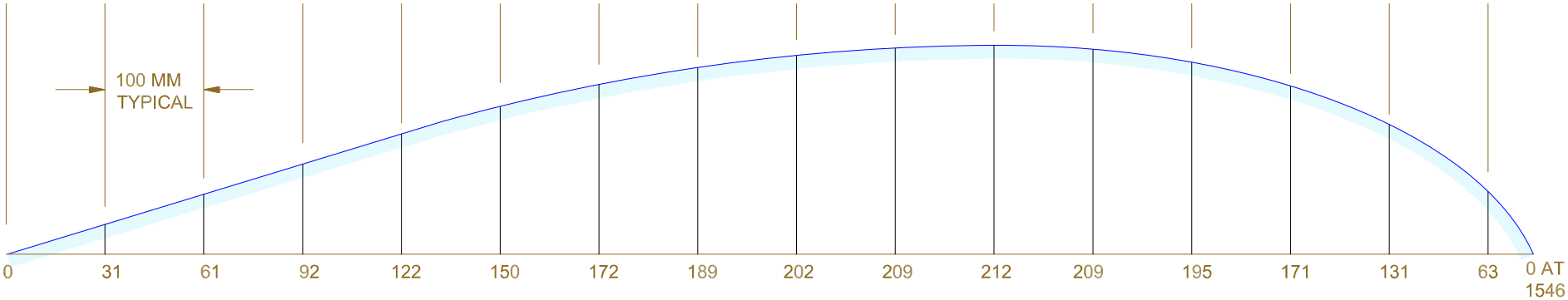
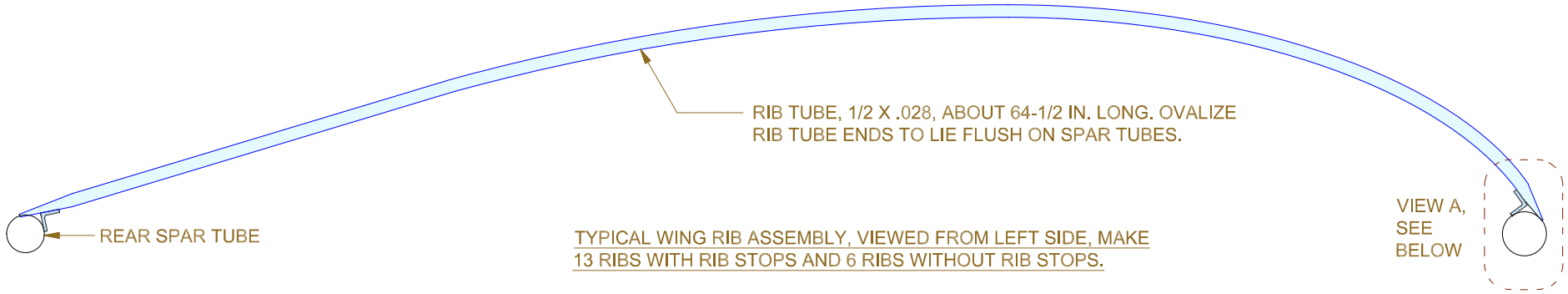
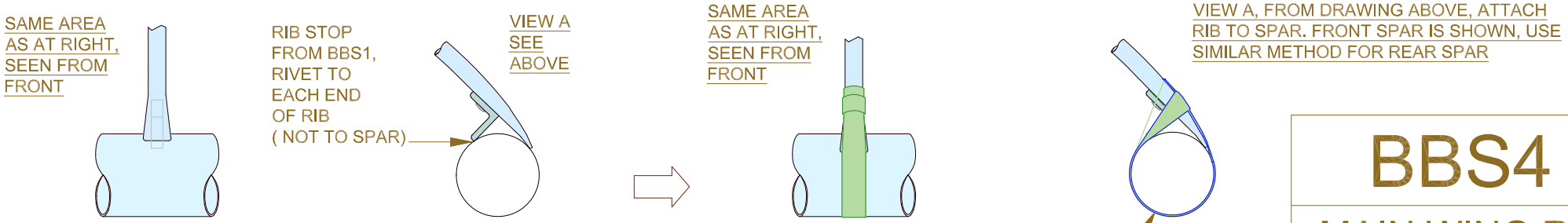


THIS CURVE IS DRAWN ONTO A LARGE FLAT SURFACE FOR USE AS A TEMPLATE DURING THE IN-PLANE BENDING OF THE MAIN WING RIBS. IT REPRESNTS THE TOP CONTOUR OF THE WING RIB TUBE GIVEN IN MILLIMETERS, MEASURED EVERY 100 MILLIMETERS HORIZONTALLY. THE TOP OF THE RIB TUBE IS MATCHED TO THIS TEMPLATE IN A TRIAL AND ERROR PROCESS, (NOT EXPECTED TO BE A VERY EXACT). THE TUBES ARE FORMED BY HAND, PADDED VICE, TUBE BENDER, MANDREL, TIRE, TREE, OR OTHER. THE RIBS WERE BENT FIRST THEN CUT TO FINAL LENGTH.



TYPICAL WING RIB ASSEMBLY, VIEWED FROM LEFT SIDE, MAKE 13 RIBS WITH RIB STOPS AND 6 RIBS WITHOUT RIB STOPS.



ATTACH RIB ONTO SPAR TUBE USING 1/2 IN. WIDE FIBERGLASS TAPE (CUT FROM 1 IN. TAPE). APPLY TAPE AROUND SPAR TUBE & RIB AS SHOWN. BOND WITH WET LAY UP OF EPOXY, 26 PLACES. (RIBS ARE GENERALLY BONDED ONTO SPARS RATHER THAN RIVETED IN ORDER TO AVOID DRILLING HOLES IN CRITICAL AREAS OF THE MAIN SPAR TUBES, WHICH COULD WEAKEN THEM.)

BBS4

MAIN WING RIB

BLUEBIRD ULTRALIGHT AIRPLANE	M. SANDLIN FEBRUARY 25 2022