INITIAL CORE PREPARATION (1/03/09)

Anker Berg-Sonne cores are uniquely & ingeniously sized & cut to preserve a fully intact TE area. A rearmost area behind it contains typical irregularities from hot wiring along a thin TE. Trimming to the intact area, as detailed below, yields straight, clean TE's & intended finished chords.

Anker's equipment is so accurate that fine spanwise lines along coordinate points are actually preserved. The Mylar carriers will bridge over these to give a smooth finished surface.

<u>SEC. 1's</u>: Evenly butt the cores to each other at the center. If one intact area rear edge there is a hair ahead of the other, trim to it first. Use a straight edge & a sharp single-edged razor blade held at a very low angle to avoid tearing. Identically trim the other one so right & left pieces are symmetrical with identical outboard chords.

Butt the two at their centers. If a straight line is not formed along the TE, support cores on their bottom beds. Use the squared-up #60 sanding block to equally touch up where they butt to get a continuous straight line. Touch up outboard ends so perfect right angles are formed with the TE. Judge this using a sheet of computer paper, etc.

<u>SEC. 2's</u>: Touch up the vertical inboard ends to butt 1's flush & make right angles with their untrimmed, intact TE lines. Butt a 1 & 2 together, even along their LE's. On the inboard end of a 2, mark where to trim the TE to match the 1. Get a continuous straight line across the four pieces.

<u>SEC's. 3 & 4</u>: Proceed similarly to get a continuous straight TE line across all 8 pieces except for the 120" & 130" cores where Sec. 4 rakes forward $\frac{1}{2}$ " along the TE.

TRIMMING BED TE'S: Aligned along the LE, place each core section in its bottom bed. 1/4" behind a trimmed core TE, mark a parallel line. Trim excess bed behind it, as illustrated below.



Trim top beds to match. The Mylar carriers will later be sized to extend to the rear edges of the trimmed beds. The glass & CF layup will extend to the carrier TE's. Cores will be positioned 1/4" ahead of the carrier TE's. The carrier TE's will be aligned & supported between the beds during bagging. This all helps to get an undistorted, reinforced & sharp TE end to end across the wing.

<u>FEATHERING TRIMMED CORE TE's</u>: In trimming cores to within the intact area & getting the continuous straight line TE, some TE thickening can occur. To quickly & accurately feather it out, refer to the picture below. With brads, secure a straight piece of 1/16" aluminum bar in position to shim & firmly support a core section. Parallel to the bar & 3/8" from it, tack a wood strip.



This setup angles & guides the wall paper seamer roller to thinly compress the core along its extreme TE. Bear the roller against the guide & the work surface. Hold the core in place as you run the roller along the TE. Easy does it.

Return to Const. File #3, Part 1.