

AN INTRODUCTION TO
CONSTANT CAMBER™

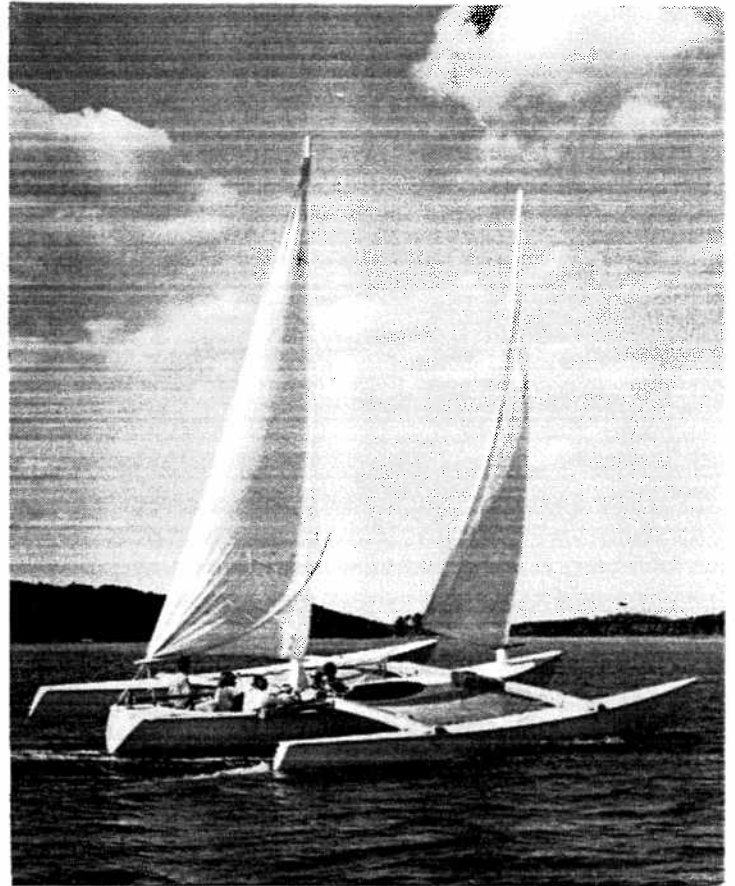
A UNIQUE CONSTRUCTION METHOD

Constant Camber (CC) is an outside-in building method that results in a "molded plywood" boat. Unlike conventional molds, a single CC mold can produce many different designs. In fact, the mold is actually a laminating form.

Full or partial length panels are laminated of veneer and epoxy to produce frameless, two-piece hulls from a single unilateral mold. Series production of panels is made possible by the geometric elimination of "spiling" the individual veneer planks. Patented by Jim Brown, this constant spile of each plank eliminates the labor-intensive hand fitting of pieces. Panels can be assembled with various adhesives using either staples or vacuum bag for pressure while the adhesive cures. Vacuum bagging is the preferred method since it is faster and achieves a higher quality laminate with less adhesive. Unlike the complex vacuum pressure methods used in the

aerospace industry, wooden veneer bagging is a fairly simple process requiring only common materials, most of which can be purchased at the local hardware store.

Dimensional stability is achieved without internal skeleton by slightly torturing the compound panels during hull assembly which imparts "prestressed eggshell rigidity" to the panels. The resulting structure has extremely high strength for low weight and no flat areas. Most material is relegated to the skin, thus gaining adequate skin thickness for good insulation and high impact/puncture resistance. Building a dimensionally perfect hull is accomplished without "framing up"; the mold and panels are all self-fairing. Hull shape is established by the mold geometry plus the mating perimeters of its panels. Panels are also used for decks, wing fairings and cabins where appropriate on some designs.



The prototype SIB sailing workboat for Third-World countries.