

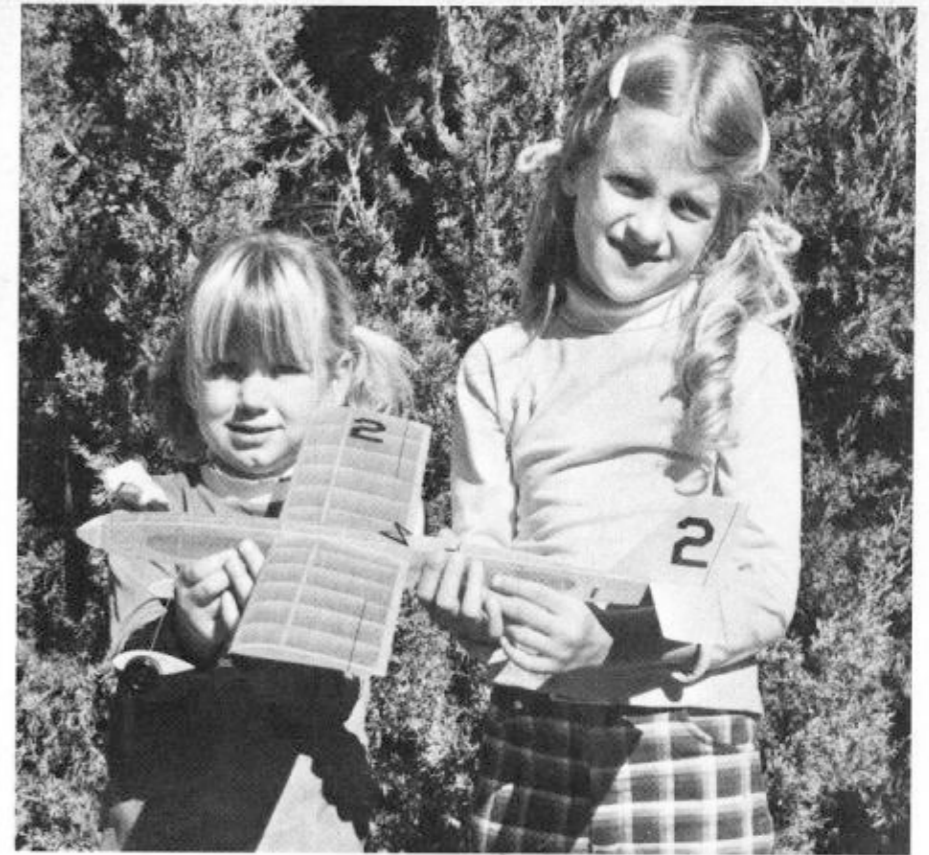
PHOTOGRAPHY: LARRY KRUSE

block should be faced with bushings on the front and back side after the prop shaft hole is drilled. The hole is drilled with 3° downthrust and 4° right thrust to counteract propellor torque. The landing gear can be epoxied in place, noting that it is slanted forward slightly for better shock absorption.

Note the 1/16"x1/8" pieces provide the entire superstructure of the fuselage. The top longeron can be glued down in a continuous strip and sanded to the taper shown on the plans, after which the cockpit portion can be removed. Small pieces of 1/16"x1/8" should be cut and butted up against the longeron at each horizontal station and then sanded to a triangular cross-section after the glue dries. The entire fuselage should then be given two coats of thinned dope and set aside.

The wings are conventional in structure and should be built flat on the plans. The 1/16" triangular gussets are important in maintaining structural integrity when tissue is applied, so they should not be omitted. Note that the spar, leading edge and trailing edge pieces protrude 1/8" past the root rib in order to interlock with the fuselage. The root ribs are set at the appropriate dihedral angle by using the dihedral gauge shown on the plan. The wing panels, like the fuselage, should be sanded, given two coats of dope, and set aside for covering.

Rudder and stabilizer parts are cut from light 1/16" "C" grain which has previously been sanded to approximately 1/20" thickness for weight consideration. Give the



Kerri and Kimberly Kruse straighten Dad out on things like realism and other such requirements. Below: Larry will be surprised to see this photo in the layout, Don's original Bandit, built-up ribs, October '49 FM. Berkeley kitted a smaller version, together with Don's V-16 and Dragon.

The Bandido

by Larry Kruse

A Sport Rubber design rebuilt from memories of the good old days and some great Berkeley creations.

Each fall after the Nationals, I undergo a transitional period between the end of flying season and the beginning of building season—a time spent in leisure by lofting gliders and small rubber-powered jobs into cool twilight air and watching them flutter to earth like the leaves they land among.

The last year or so my two older daughters have been helping me in this Indian summer endeavor, since they're now both big enough to enjoy the wonder of flight. However, along with the enjoyment, they've become more demanding in terms of the way the airplane looks and performs. Where previously they were happy with a stick model like a Sig Cub, this year they insisted that their airplane should "have a place for people to ride," and "have a pointy nose." Not feeling up to sparring with a vocal four year old and a six year old whose mind is made up, I sat down at the kitchen table one Sunday, and with their guidance, sketched until the plane looked like they wanted it to look, being sure to in-

clude a "place for people to ride" and "a pointy nose."

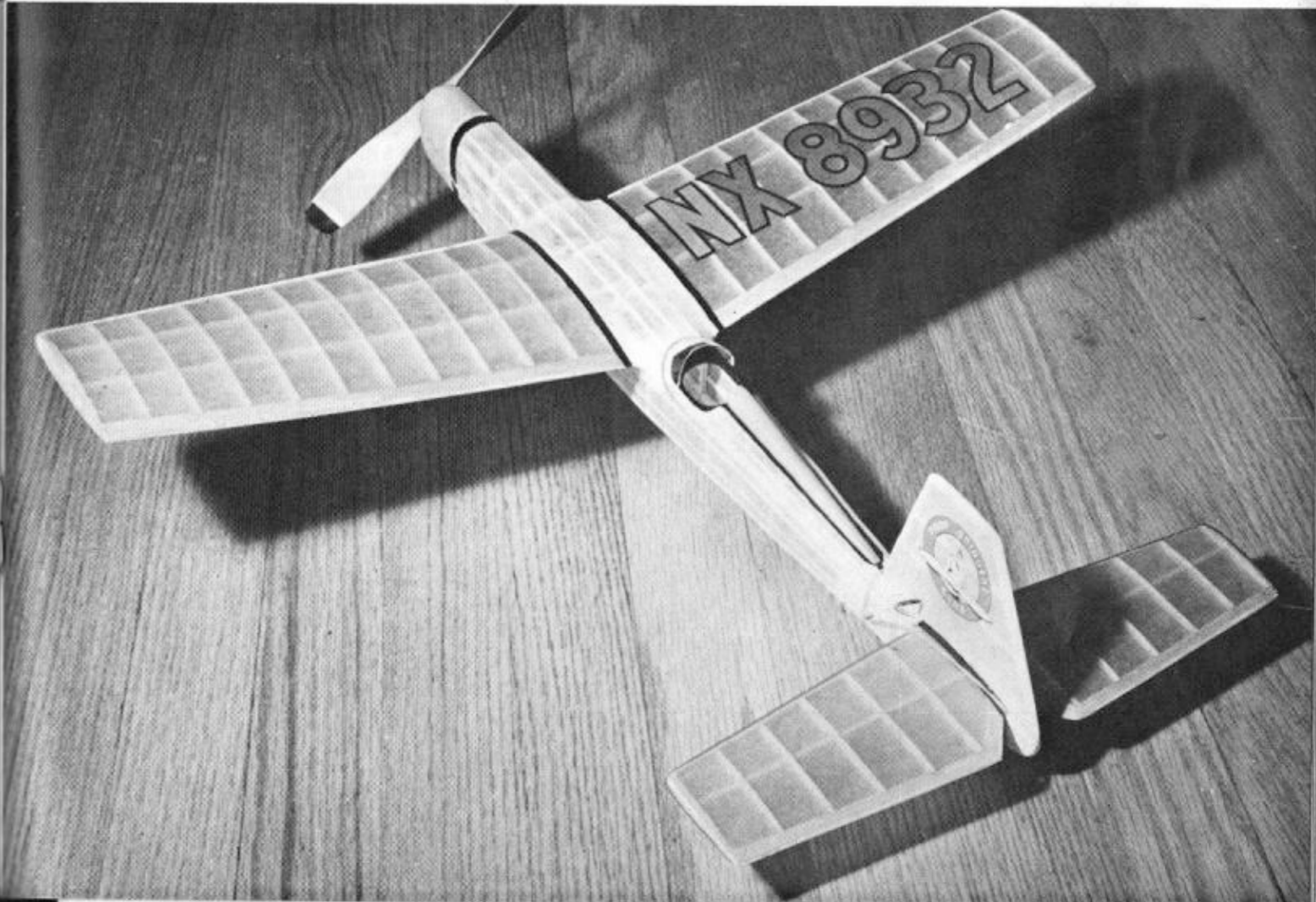
The resultant Bandido is as much a product of my own first fascination with flight as it is a product of my daughters' wishes. As a boy, among the first airplanes I ever built which truly flew were three little rubber-powered cuties kitted by the long-since defunct Berkeley organization, the master modeling company of the 1950's. The three planes, as I now recall, were originally kitted individually as the Dragon, a snappy-looking biplane; the V-16, a V-tailed miniature speedster; and the Bandit, either a shoulder wing or a low wing (I can't recall which) with a low thrust line in relation to the total fuselage height. Later on in Berkeley's career, the three planes were all boxed up together and sold as Triple Treats, which indeed they were.

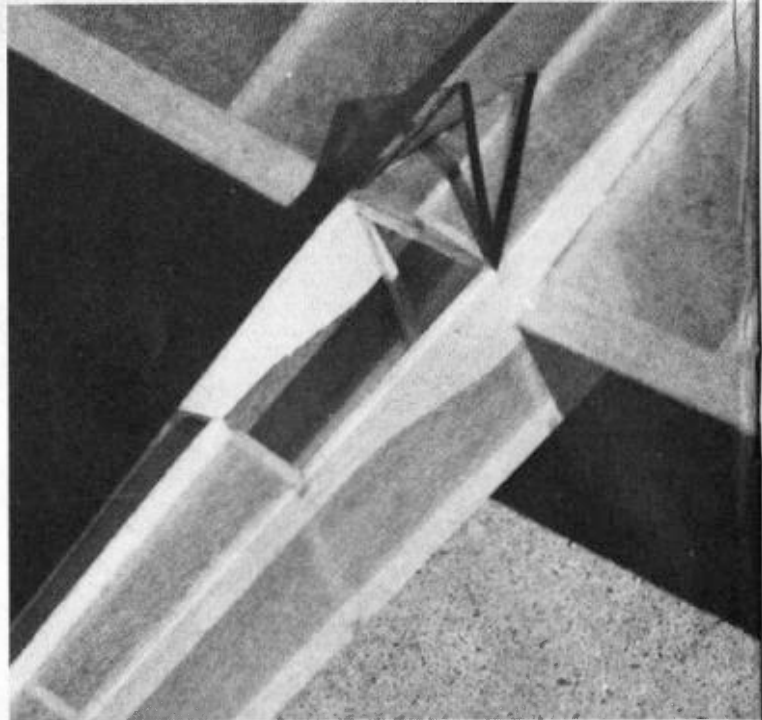
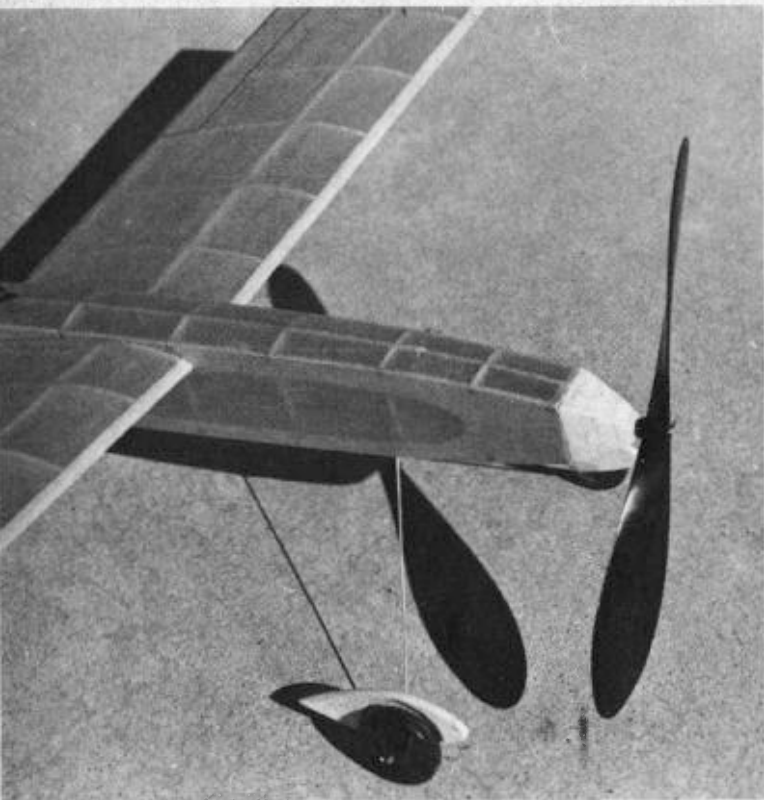
These three designs (were they Henry Struck's?) gave me such pleasure, that memory greatly influenced the design of the Bandido, employing as nearly as re-

call would permit the same fuselage structural techniques, a built-up wing, and sheet empennage that the originals had. (Editor's note: Don't blame Henry Larry, I designed all three. My Bandit first appeared in October, 1949 FLYING MODELS as a 28" sport design, photo herewith. Later it was kitted by Berkeley, about 2/3 size with a structure quite similar to what you remember here. I currently have an R/C version in mind. — Don McGovern)

Basic fuselage construction can begin by tracing the sheet sides from the plan and carefully locating the notches for the wing spar, leading and trailing edges. The vertical uprights are 1/16" sq. and should be glued in place before the fuselage horizontal members are added. The 1/8" sq. horizontal nose pieces can then be glued in place, the tail pulled together, and the other 1/16"x1/8" horizontal pieces added.

The landing gear wire and support blocks and the nose block can both be fabricated while the fuselage dries. Both should be trail fit and trimmed as needed. The nose





Kimberly-Kerri Korporation explained to the draftsman all about zorchy colors, sharp noses and breezy cockpits. The pilot would have a problem with the rubber drilled through his chest. **Beneath:** It's a lean machine.

rudder and stab only one coat of very thin dope. Although the capstrips will help prevent warping to some degree, care must be used in finishing the tail pieces.

The original Bandido was covered with orange Japanese tissue with black trim which made a very striking little airplane. It's fairly rakish lines, however, permit numerous trim schemes, so you may satisfy yourself in that respect. Use no more than two coats of thinned clear dope on the wings and fuselage—none on the tail. Stay away from color dope or the overall increased weight will severely limit performance. The wheelpants, windshield, and spine strip on the turtle deck tend to dress

up the ship, but are not essential if you wish to omit them. The aileron, rudder, and elevator lines were applied using $\frac{1}{32}$ " newspaper border tape, available from the ad department of your local newspaper.

Flight testing should be done over the mythical "tall grass" using approximately 50 turns on two loops of $\frac{1}{8}$ " Sig rubber for initial flights, with the C.G. located as shown. When released, the plane should climb out in a shallow right hand pattern and then probably drop rather abruptly as power runs out. As additional turns are added, the power pattern should smooth out in its transition phase and the

plane will make a sweeping 360° turn landing with the prop still ticking over. Make all adjustments using thrust shims. If the plane stalls under power, add more downthrust. If it does not turn, add more right thrust until a comfortable and consistent right hand pattern is achieved. Use stab or rudder tab adjustments only if large trimming problems arise while test flying.

Hopefully, the Bandido will provide as much flying pleasure for you as it has designing and building pleasure for us. As a transitional plane designed primarily for my daughters, it's a fun ship for a transitional season.

