



N.B. THIS MODEL CONFORMS TO THE S.M.A.E. CLASS 'A' TEAM RACE FORMULA IF A 15 CC. TANK IS FITTED INSTEAD OF A 10 CC. TANK

NERVENSÄGE
 INTERNATIONAL CLASS TEAM RACER
 M.A. W. KRÖGER 3/6
 200 SPAN 23 1/2" LENGH 18"
 COPYRIGHT MODEL AIRCRAFT
 19-20 NOEL ST LONDON W1

NERVENSAÛGE

A WINNING INTERNATIONAL
CLASS TEAM RACER
FROM GERMANY

by Wilfred Kröger



Note:— This International class team racer will conform to S.M.A.E. Class 'A' rules if a 15 c.c. tank is fitted.

THE prototype of this model was designed in 1953 according to S.M.A.E. Class A rules, and won all contests in which it was entered.

After the 8 dm²—10 c.c.—tank rule was formulated, the *Nervensäge* was re-designed to meet the new F.A.I. formula for team races and proved to be equally successful. Its contest record in 1954 showed first places in the eliminators for the German Nationals and a number of local contests, and a good second place in the 5th Criterion of Europe. In this contest it was beaten only by H. Longdot, Belgium, who used a reed-valve E.D. Racer, resulting in approximately double the lappage these disc-valve engines seem to be capable of with a 10 c.c. tank. It should be noted that by fitting a 15 c.c. tank instead of a 10 c.c. tank, the model then conforms to the S.M.A.E. formula for Class A team racers.

The *Nervensäge*, meaning "Nerve Saw" in English, has been flown mainly with the E.D. Racer, now equipped with a reed valve as well, but proved to be faster with a Webra Mach 1, though calling for an experienced mechanic in the latter case. Lappage with a normal engine is approximately 25 per tank, although with a properly matched flutter-valve, more than 40 laps should be possible with only two pit-stops during the 10 kilometre, 120-lap race.

Construction

Construction is quite straightforward. Cut wing from medium balsa and sand down to airfoil section. The U/C should be firmly bound and cemented to the plywood former F2. Assemble fuselage main structure flat on plan, pinning engine bearers down with their ends slightly

over the edge of the board to allow F3 to be cemented in between (top to bottom). Former 2 and hardwood spacer should now be cemented in. Allow to set firmly and cut fuselage sides in the meantime. Fit wing between formers and secure with pins and scrap balsa, applying ample cement. Support wing under tips for proper rigging.

After drying, remove from board and cement fuselage sides to main structure. Make sure fuselage centre line is straight. Cut tailplane from $\frac{1}{8}$ ply and cement to top of fuselage sides after linen hinge has been fitted. Fit tank and control plate as indicated on plan and carry out strip planking on fuselage top. Sand smooth and fit $\frac{1}{8}$ ply fin. After installation of tank, the fuselage front can be covered with hollowed-out soft balsa

block and sanded smooth. Now add fuselage bottom after those parts of the fuselage sides previously cut out have been fitted under wing centre. Beat cowling from 24 g. aluminium to fit engine. After fitting of canopy, tail skid and wire guides, sand all surfaces smooth and finish with lightweight Modelspan, sanding sealer and fuel proof paint. Make sure that linen hinge does not get stuck with paint.

Flying

The original model flew straight off the board. With an 8 x 8 in. Frog plastic prop fitted, you can take the *Nervensäge* "off the deck" which sometimes becomes necessary to avoid collisions. Weight of the prototype was 16½ oz. No wing-tip ballast or fin off-set was necessary. The model should balance on, or slightly in front of, front line. In all contest flights, German "Dynasprit" non-nitrated fuel has been used, allowing fixed compression and needle settings, which are doubtful with nitrated fuels.

