

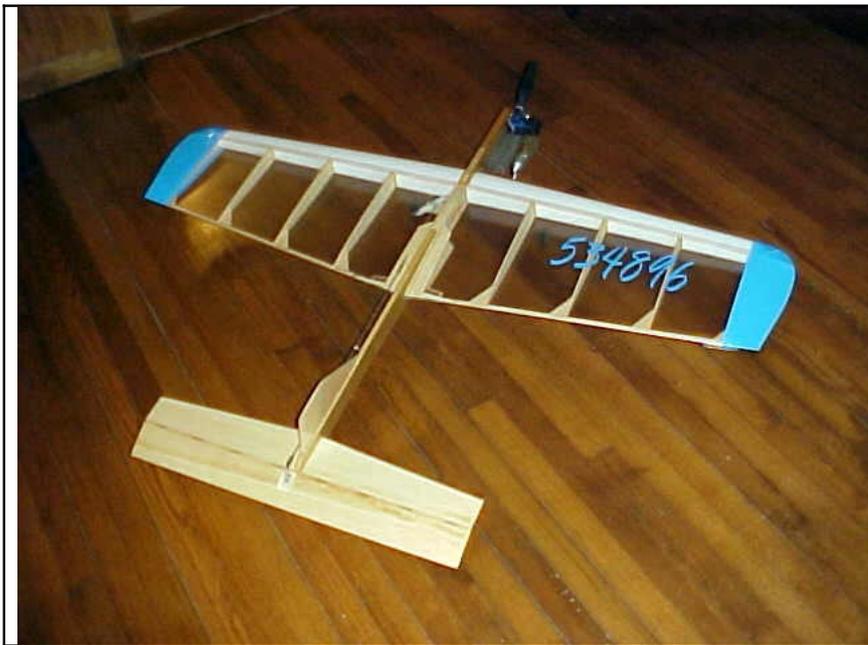
TEOSAWKI

The End Of Stunt As We've Known It
Design By Clayton Smith

TEOSAWKI is a simple durable low cost model using readily available .40 to .46 engines that, when measured by flying performance, can carry the CL stunt newcomer from beginner to a 500 point advanced pattern. This one really flies like a "prostunter," maybe better. TEOSAWKI is a tool to confidently perfect needed skills without the burden of trying to carry, at the same time, the marginal performance of the newcomer's typical precision stunt models with their seemingly endless tradition of complications. The prototypes have won and placed competitively at contests including Brodaks, King Orange and the AMA Nationals. Even while giving up all builder of model appearance points in expert it has garnered competitive 500+ scores.

Construction will seem unorthodox to veteran stunt builders. The methods are those perfected over the past decade by the Eastern European and Russian combat designers. Even at only 35 ounces ready to fly and 635 sq. inches of wing its durability belies its combat heritage. Crashes into pavement hard enough to break off engine mounts hasn't stopped TEOSAWKI from flying the same day.

You will find that the TEOSAWKI executes the Precision Aerobatics Pattern easily and at your will. Don't get distracted by how it looks or its seemingly unusual flapless design. Just get it in the air. Perfect your skills with TEOSAWKI, "show and shine models" will come later.



Specifications:

Span: 53"
Length: 41"
Area: 635 sq. inches.
Root Chord: 14" 13.5% airfoil.
Tip Chord: 10" 12.5% airfoil.
Mean 25% Aerodynamic Chord: 0 degrees sweep.
3/4" behind CG.
Step down elevator/stabilizer.
Weight: Approx. 24 oz excluding engine and fuel tank.

Here's something to get the Prostunt guys really going. TEOSAWKI is asymmetric. Having one wing longer, asymmetry, is not all that unusual especially with older designs. Kind of out of favor today however. But those asymmetric designs and even new ones today have a longer inboard wing. Now the surprise. TEOSAWKI has a longer outboard wing. Not by much, just a quarter inch. Just enough to assure the separation between thrust line and the mean aerodynamic center(MAC). Phil Cartier wrote the best explanation of this in the June 2000 issue of Flying Models. Bill Netzeband had a good comparative test some time ago in Stunt News. What this really amounts to is to place the engine bearer side of the motor mount in alignment with the centerline of the wing. This differs from the typical profile model which has the center of the fuselage instead of the center of thrust bisecting the wingspan. That conventional design results in the thrust line being outside the wing's physical centerline and closer to the MAC. Because a CL model is flying in a circle the wing's center of lift is outside the physical plan form centerline of the wing. At the slow speeds of Stunt models this distance between centerline of thrust and MAC is small making its relationship sensitive for good line tension. The closer the thrust line is to the MAC the poorer the line tension. On the TEOSAWKI we are talking about just an extra quarter of an inch to assure that separation. Get the thrust line outside the MAC and you've got a freeflight with lines attached. Sort of like an All American Sr. taking off. (You have to fly an All American to understand.) But then why not put the engine thrust line on the inboard wingtip, plenty of separation. A couple pounds of outboard tip weight too, that's why. Enough theory for now.

FLYING

Strongly recommend a stock OS 46LA running the stock muffler (the muffler baffle may be removed. Fly on 60 to 65 foot .015 or .018 lines. Prop sizes of 10/5, 10/6, 11/4.5, 11/5, 11/6, and 12/4.25 have worked well. TEOSAWKI's have proven easy to fly forgiving planes. Good in wind. Good tension everywhere with equal turn qualities. Can turn on a dime if needed. Capable of full pattern even with laps over 6 seconds. Ideal at 5 to 5.5 second laps.

It is The End Of Stunt As We've Known It, TEOSAWKI.