BEBE JODEL D-9

BY JOE JOHNSON

TELCO CO-2 POWERED FREE-FLIGHT SCALE

DRAWN BY DON MCGOVERN

ROUND OFF LEADING EDGE TO SMOOTH AIRFOIL CONTOUR

LANDING GEAR WIRE

3/32" SQ. SPRUCE

1/16" SQ.

3/32" SPRUCE

USE EPOXY AROUND LANDING GEAR MOUNT

THREAD WRAP LANDING GEAR TO SPRUCE

1/8" X 3/16" LEADING EDGE

1/8" SHEET WING TIP

1/16" SHEET GUSSET

1/16" X 3/16" BALSA SPAR

START SPAR TAPER TO 1/8"

W-1

W-2

W-3

BLACK LICENSE TRIM

USE JIG TO ANGLE THIS RIB

ALL RIBS OF 1/16" SHEET

1/16" SHEET GUSSET

BLOCK UP EACH TIP RIB 1" FOR CORRECT DIHEDRAL

LEFT WING TIP PLAN JOINS TO THIS WING RIB

1/16" WIDE X 3/32" DEEP TRAILING EDGE RIB NOTCHES

1/2" TAPERED TRAILING EDGE STOCK

LEFT WING TIP LAYOUT APPEARS BELOW

.008" CLEAR PLASTIC WINDSHIELD

DIHEDRAL ANGLE RIB JIG

WINDSHIELD PATTERN

.008" PLASTIC

1/16" C-GRAIN RUDDER FIN

LANDING GEAR PATTERN .045 DIA. M.W.

COWLING IS BUILT UP AROUND ENGINE WITH 3/16" BALSA BLOCKS TO FIT

TELCO ENGINE SCREWS TO A BASSWOOD MOUNTING BLOCK

CARVE FROM FOAM

CARVED FROM FOAM

CO-2 TANK

A B C D

C.G.

1/16" BALSA SHEET SIDING

1/16" SQ. (INSIDE)

OPTIONAL CUT-OUT

1/16" SQ.

1/32" DIA. WIRE TAILSKID

D AND C

1/16" SHEET 1 OF EACH REQ'D

TELCO CO-2 ENGINE

CO-2 FILLER NIPPLE

1/16" PLYWOOD MOUNT

BALANCE AT CENTER OF GRAVITY

FOR LONGER FLIGHTS USE A 6 C.C. TANK FROM PECK POLYMERS

1/16" X 3/16" LANDING GEAR FAIRING

1/16" X 3/16"

.045 DIA. LANDING GEAR

ROUND OFF LEADING EDGE

1/16" C-GRAIN BALSA SHEET STABILIZER

SIG NO. 540 1-1/8" DIA. WHEELS

B

1/16" 1 REQ'D.

SCRAP BALSA TO FORM DUMMY ENGINE CYLINDERS

WINDSHIELD

1/16" DIA. WING DOWELS

DOWEL

SAND TRAILING EDGE TO AIRFOIL SHAPE

1/8" X 3/16" L.E.

1/8" SHEET WING TIP

W-3

STAB OUTLINE

W-2

W-1

FOAM TURTLEDECK

1/16" X 3/16" (BOTTOM)

1/16" RUDDER

SEC. A

1/16" PLY 1 REQ'D

1/16" SQ. BALSA

JOIN TO WING PLAN

1/16" BALSA SIDING

THIS IS THE LEFT WING TIP LAYOUT

1/16" PLYWOOD FILLER MOUNT

ALL RIBS ARE OF 1/16" SHEET

W-3

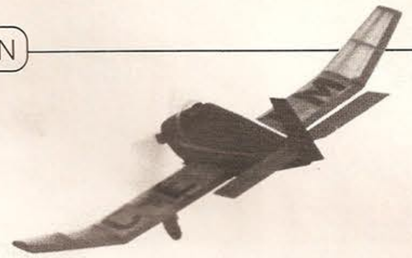
W-2

W-1

THIS PLAN IS PRINTED FULL SIZE FOR YOUR BUILDING CONVENIENCE

0" 1" 2" 3"

CONSTRUCTION



BEBE JODEL D.9

A scale CO_2 design that is easy to construct and has outstanding potential despite its low wing position. The prototype was really an oversized model.

Design by Joe Johnson

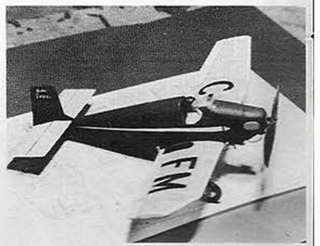
Text by "Doc" Mathews

POWERED BY CONVERTED Volkswagen engines abandoned by the retreating German Army, the simple all-wood Jodel D.9 Bebe was to be a great boon to the post-war French sport flying movement. Of simple to fabricate, all-spruce construction covered with plywood and fabric, the Jodel uses a simple rubber sprung undercarriage and an all-moving rudder with no fin. Approximately 700 Bebes have been constructed in France and elsewhere since 1948. The full-size D.9 is truly a "baby" in that its span is only 23 feet and its length 18, and its unusual polyhedraled wing gives it the strong illusion of being an oversized model airplane.

That the Bebe Jodel possesses ideal moments for scale modeling is quite obvious, as is its complete freedom from complex curves and curlicues. Several scale models of the D.9 have been published through the years, and several kits produced. We all fondly recall a delightful free flight kit produced by Midwest for many years. As an exercise in dispelling some of the bad reputation which low-wing prototypes are saddled with, Joe Johnson developed the Bebe Jodel; that it flies extremely well is quickly evidenced by the photos. One need only keep the weight of the model (its center of mass) as far below the center of lift as is practical to successfully free-flight nearly any low-wing prototype.

The use of relatively heavy undercarriage and light structures above the wing produces a delightfully easy to trim model possessed of no untoward vices. If any reader questions the need for a heavy undercarriage on this model, we would invite him to construct and trim this model, then cut off the undercarriage. We promise a rapid reduction in flying stability.

The use of a CO_2 powerplant coupled with removable wing, and simple construction makes this an excellent first project, as well as a scale model with definite contest-winning ability. Whether yours will be for fun or competition, let's show you how simple it is to build this cute little French "Baby."



This little cutie is powered by a Telco CO 2 engine; plans are full size.