BAG #6

THE THIRTY-SIX PLANS IN THIS BAG OF NUTS,
'NUMBER 6', ARE NOT PEANUT SCALE, BUT HAVE BEEN
REDUCED TO PISTACHIO SCALE SIZE, (8 INCH WING SPAN).
THEY WERE SELECTED BECAUSE WALT MOONEY LIKED THEM
THE BEST OUT OF SEVERAL HUNDRED OF HIS RUBBER SCALE
DESIGNS.

WHERE THERE ARE DIMENSIONS, PLEASE RECOGNIZE
THAT, THE ACTUAL SIZES OF THE COMPONENTS ARE 8/13TH
AS LARGE AS CALLED OUT. WHERE SHEET SIZE IS CALLED
OUT AS ONE SIXTEENTH, USE ONE TWENTIETH OR ONE THIRTYSECOND SHEET BALSA. SUBSTITUTE ONE TWENTIETH SQUARE
FOR ONE SIXTEENTH SQUARE, ETC. WHEEL AND PROPELLER
DIAMETERS SHOULD MATCH WHAT IS SHOWN ON THE PLANS.
USE THE LIGHTEST WEIGHT TISSUE, OR CONDENSER PAPER
FOR COVERING. USE VERY THIN TRANSPARENT PLASTIC FOR
THE WINDOWS AND WINDSHIELDS. DON'T OVERDO PAINTING
OR DOPING YOUR MODEL.

IF ALL THE STRUCTURE ON THE MODEL AND THE
COVERING COULD BE SCALED DOWN, THE MODEL WEIGHT
WOULD GO DOWN BY THE CUBE OF THE SCALE FACTOR
WHILE THE SURFACE AREAS WOULF DECREASE BY ITS SQUARE
AND WING LOADINGS WOULD DECREASE. FOR INSTANCE:
8/13 = .61538 = SCALE FACTOR = DIMENSION MULTIPLIER.
.61358 SQUARED = .37869 = AREA MULTIPLIER = A
.61538 CUBED = .23304 = VOLUME MULTIPLIER = V

THE WING LOADING MULTIPLIER WOULD THEN BE V/A = .61538 AND THE WING LOADING WOULD TURN OUT TO BE LESS THAN TWO THIRDS OF THE ORIGINAL PEANUT'S. SUCH A MODEL WOULD BE CAPABLE OF LONGER FLIGHTS THAN ITS PEANUT SCALE PREDECESSOR. UNFORTUNATELY THINGS LIKE TISSUE PAPER WILL ONLY DECREASE IN WEIGHT BY THE AREA MULTIPLIER. EVEN SO, THESE MODELS HAVE THE POTENTIAL FOR LONG DURATION FLIGHTS, AND THEY'LL FLY SAFELY IN SMALLER INDOOR SITES.