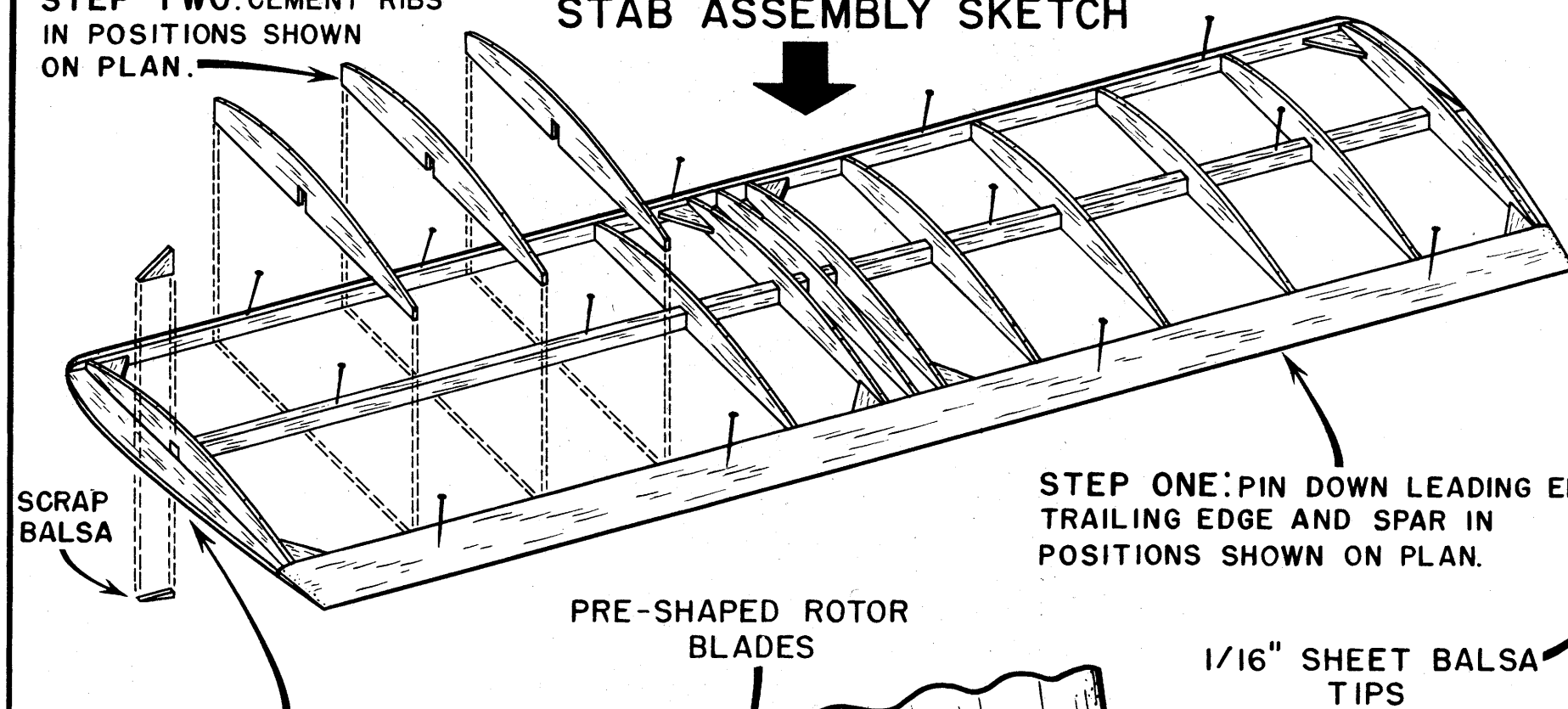


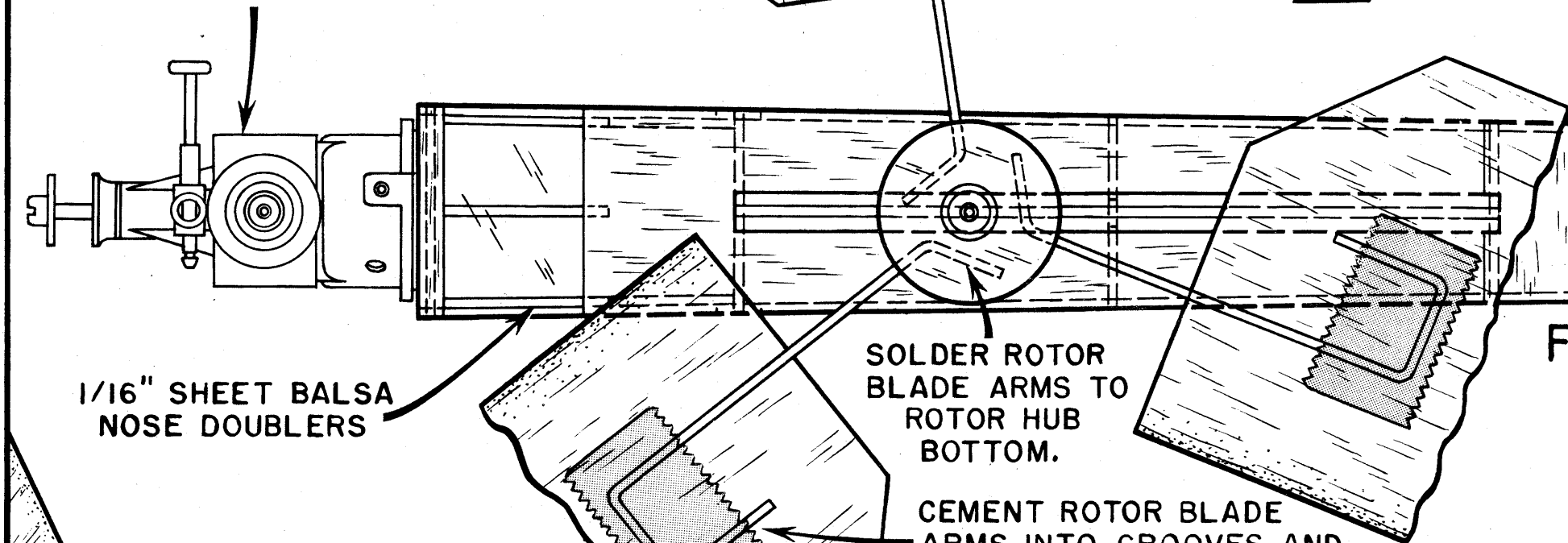
STEP TWO: CEMENT RIBS IN POSITIONS SHOWN ON PLAN.

## STAB ASSEMBLY SKETCH



STEP THREE: CEMENT TIPS AND GUSSETS IN POSITION. SHAPE AND SAND STRUCTURE TO COMPLETION.

ALLYN SKY FURY .049



STAB LEADING EDGE: 3/16" SQ. Balsa

1/16" SHEET Balsa GUSSETS

STAB RIBS: 1/16" SHEET Balsa

1/16" SHEET Balsa GUSSETS

STAB

PLAN

STAB SPAR  
1/8" x 3/16" Balsa

1/16" SHEET Balsa TIPS

DIRECTION OF ROTATION

SOLDER

SOLDERING IRON

SHIFT STAB TO LEFT TO ADD RIGHT TURN.

SHIFT STAB TO RIGHT TO ADD LEFT TURN.

STAB TRAILING EDGE  
1/8" x 5/8" Balsa PRE-TAPERED.

STAB TIP DETAIL

FUSELAGE SIDES, TOP AND BOTTOM ARE 1/16" SHEET Balsa.

3/32" DIA. DOWEL

## FUSELAGE TOP VIEW

BOTTOM SHEET JOINT

1/16" SHEET Balsa NOSE DOUBLERS

SOLDER ROTOR BLADE ARMS TO ROTOR HUB BOTTOM.

CEMENT ROTOR BLADE ARMS INTO GROOVES AND COVER WITH FABRIC.

ATWOOD .049

SOLDER RETAINER TO ROTOR MAST.

1/16" DIA. WIRE ROTOR BLADE ARMS.

1/16" DIA. WIRE ROTOR MAST

ENGINE INSTALLATION WITH SEPARATELY MOUNTED TANK

SPACEBUG JR. .049 CELLULOID WINDOWS

CENTER OF GRAVITY

BALANCE MODEL WITHIN THIS RANGE FOR THE BEST PERFORMANCE.

ORIGINAL MODEL USED 0° TO 1° DOWNTHRUST, NO SIDETHRUST.

CUT OUT AIR INTAKE HOLE FOR SPACEBUG JR. SCRAP Balsa FAIRING IS OPTIONAL.

LANDING GEAR STRUT IS SANDWICHED IN BETWEEN PLYWOOD FIREWALL AND PLYWOOD BULKHEAD, IN SHEET Balsa CORE.

PYLON ASSEMBLY DETAIL

CEMENT ROTOR MAST INTO 1/16" DIE-CUT SHEET Balsa CORE.

3/32" SHEET Balsa SIDES.

## BASIC FUSELAGE ASSEMBLY (TOP REMOVED FOR CLARITY)

UNDER 7°

OVER 7°

DECREASING ANGLE OF TWIST UNDER 7° WILL DECREASE LIFT ON ENTERING BLADE, INCREASING LEFT TURN CHARACTERISTICS. INCREASING ANGLE OF TWIST OVER 7° WILL INCREASE LIFT ON ENTERING BLADE, INCREASING RIGHT TURN CHARACTERISTICS.

EFFECT OF CHANGING TWIST IN ROTOR BLADES

## FUSELAGE SIDE VIEW

FUSELAGE BULKHEADS: 1/16" SHEET Balsa

SIDE JOINTS

1/16" SHEET Balsa SUB-RUDDERS.

## FLIGHT ADJUSTMENTS

IF MODEL STALLS OR SLOW ROLLS IN THE CLIMB ADD DOWNTHRUST TO THE ENGINE, INCREASE TURN OR INCREASE ANGLE OF STAB, WHICHEVER IS MOST DESIRABLE. SMALL TURN ADJUSTMENTS CAN BE MADE WITH RUDDER TAB OR SHIFTING STAB POSITION OFF CENTER. FOR LARGE TURN ADJUSTMENTS OBSERVE PROCEDURE FOR OBTAINING DESIRED BLADE ANGLE BY INCREASING OR DECREASING TWIST IN ROTOR ARMS. BEFORE LAUNCHING MODEL, SPIN ROTOR BY HAND AND HOLD INTO WIND TO SPEED UP ROTATION. WHEN MODEL IS PROPERLY ADJUSTED IT CAN TAKE OFF ALMOST VERTICALLY. A VERTICAL DESCENT IN THE GLIDE IS EASILY OBTAINED BY SHIFTING THE CENTER OF GRAVITY REARWARD OR DECREASING STAB ANGLE, AND REDUCING TURN. FOR THERMAL TURN DESCENT IN GLIDE, MOVE CENTER OF GRAVITY FORWARD OR INCREASE ANGLE OF STAB. THE DESIGN IS EXCEPTIONALLY STABLE AND THE MODEL IS VERY DURABLE AND CAN BE VERY WELL ADJUSTED BY ANYONE OBSERVING THE PROCEDURES OUTLINED.

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DRAWN BY DEL GATTO

BLADE RETREATS HERE AT ABOUT A 10° TO 15° NEGATIVE ANGLE TO THE THRUST LINE.

BEND ARMS UP TO PUT IN ABOUT 2 1/2" DIHEDRAL.

BLADE ENTERS HERE AT ABOUT A 1° TO 3° POSITIVE ANGLE TO THE THRUST LINE.

NOTE: YOUR ROTOR BLADE ARRANGEMENT SHOULD RESEMBLE FRONT VIEW. IF IT DOES NOT, THEN RECHECK CONSTRUCTION DETAILS TO LOCATE ERRORS.

SUB-RUDDERS CEMENTED TO BOTTOM OF END RIB.

1/16" DIA. WIRE LANDING GEAR

3/32" SHEET Balsa

NOTE: TWIST IN BLADES INDUCES AUTO-ROTATION AT ALL TIMES AND IS THE KEY TO THE MODEL'S SUCCESS.

FRONT VIEW  
(HALF SIZE)

FIN

RUDDER TAB

Paul Del Gatto

**SUPER-GYRO**

by **enterprise**

