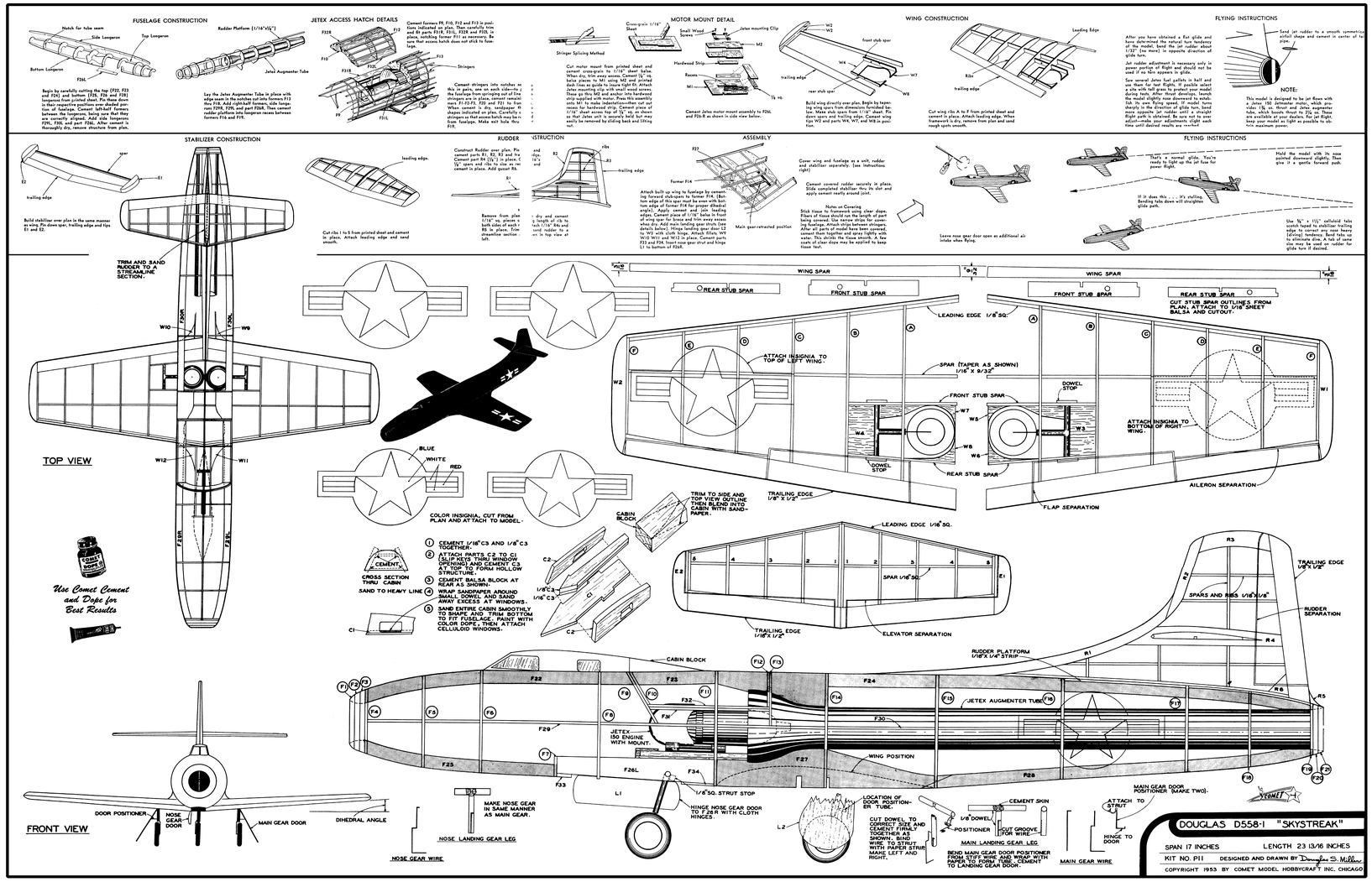
FUSELAGE CONSTRUCTION
Match for tube seam
Side Longeron
Top Longeron
Bottom Longeron
F26L
Begin by carefully cutting the top (F22, F23 and F24) and bottom (F25, F26 and F27) longerons from printed sheet. Pin these down in their respective positions over shaded portion of fuselage. Cement left-half formers (odd numbers) to longeron recess when they are correctly aligned. Add side longerons F29L, F30L and part F26L. After cement is thoroughly dry, remove structure from plan.
Rudder Platform (1/16"x1/2")
Jetex Augmenter Tube
Lay the Jetex Augmenter Tube in place with edge seam in the notches cut into formers F12 thru F16. Add right-half formers, side longerons F29R, F29L and part F26R. Then cement rudder platform and longeron recess between formers F14 and F19.
JETEX ACCESS HATCH DETAILS
F32R
F12
F32
F31R
F31L
F13
Stringers
F9
F31L
Cement formers F9, F10, F12 and F13 in positions indicated on plan. Then carefully trim and fit parts F31R, F31L, F32R and F32L in place, notching former F31 as necessary. Be sure that access hatch does not stick to fuselage.
Cement stringers into notches on this half parts, one on each side of the fuselage. Then stringing out of line stringers are in place, cement remaining former F11 (F31, F32 and F32) to fuselage. When cement is dry, sandpaper stringers and formers F11 and F12 flush with fuselage so that access hatch may be removed easily be removed by sliding back and lifting out.
MOTOR MOUNT DETAIL
Cross-grain 1/16" Sheet
Small Wood Screws
Jetex mounting Clip
M2
Hardwood Strip
Recess
M1
1/8 sq.
Stringer Splicing Method
Cut motor mount from printed sheet and cement cross-grain to 1/16" sheet balsa. When dry, trim away excess. Cement 1/8" sq. balsa pieces to M1 using M2 and printed dash lines as guide to insure tight fit. Attach Jetex mounting clip to M1 with small screws. Three grain thru M2 and another into hardwood strip supplied with motor. Press this assembly into M1 to make indentation—but not recess for hardwood strip. Remove M1 and cut out recess to a depth of 1/8" sq. as shown so that Jetex unit is securely held but may easily be removed by sliding back and lifting out.
Cement Jetex motor mount assembly to F26L and F26-R as shown in side view below.
WING CONSTRUCTION
W2
W1
front stub spar
W4
W7
trailing edge
rear stub spar
W8
Leading Edge
Ribs
trailing edge
Build wing directly over plan. Begin by tapering wing spars from dimension furnished below. Make stub spars from 1/16" sheet. Pin down spars and trailing edge. Cement wing tips W2 and parts W4, W7, and W8 in position.
Cut wing ribs A to R from printed sheet and cement in place. Attach leading edge. When framework is dry, remove from plan and sand rough spots smooth.
FLYING INSTRUCTIONS
Sand jet rudder to a smooth symmetrical airfoil shape and cement in center of tail pipe.
NOTE:
This model is designed to be jet flown with a Jetex 150 Jetmaster motor, which provides 4½ ounces of thrust. Jetex motors are available at most hobby shops. These are available at your dealer. For jet flight keep your model as light as possible to obtain maximum power.
After you have obtained a flat glide and have determined the natural turn tendency of the model, bend the jet rudder about 1/32" (no more) in opposite direction of glide turn.
Jet rudder adjustment is necessary only in power portion of flight and should not be used if no turn appears in glide.
See several Jetex fuel pellets in half and use them for test flights. If possible select one that will give maximum performance during tests. After these have developed, launch the model slightly nose downward to establish its cruise flying speed. If model turns sharply to one side, bend the rudder slightly opposite (jet rudder) until a straight flight path is obtained. Be sure not to overadjust—make your adjustments slight each time until desired results are reached.
STABILIZER CONSTRUCTION
spar
E2
E1
trailing edge
Build stabilizer over plan in the same manner as wing. Pin down spar, trailing edge and tips E1 and E2.
RUDDER
Construct Rudder over plan. Pin cement parts R1, R2, R3 and Fin Former F14 (R2) in place. Cut "Ig" open and ribs to size as cement in place. Add gusset R6.
leading edge.
R1
Remove from plan 1/16" sq. pieces on both sides of each rib. Sand ribs to streamline section at left.
Cut ribs 1 to 5 from printed sheet and cement in place. Attach leading edge and sand smooth.
CONSTRUCTION
ribs
R2
R3
trailing edge
ASSEMBLY
F22
ribs
Former F14
Main gear-retracted position
Attach built up wing to fuselage by cementing wing spars to formers F11 and F12. Top edge of this spar must be even with bottom edge of former F14 for proper dihedral angle). Apply cement and join leading edges. Cement piece of 1/16" balsa in front of former F14 to form fuselage nose. Cement when dry add main landing gear struts (see details below). Hinge landing gear door G2 to W3 with cloth hinge. Attach fillets W9 W10 W11 and W12 in place. Cement parts F23 and F24. Install nose gear strut and hinge G1 to bottom of F26L.
Cover wing and fuselage as a unit, rudder and stabilizer separately. (see instructions right)
Cement covered rudder securely in place. Slide completed stabilizer thru its slot and apply cement neatly around joint.
Notes on Covering
Stick tissue to framework using clear dope. Fibers of tissue should run the length of part for maximum strength. Cement tissue to balsa lap joints. Attach strips between stringers. After all parts of model have been covered, cement them together and spray lightly with water. This shrinks the tissue smooth. A few coats of clear dope may be applied to keep tissue taut.
Leave nose gear door open as additional air intake when flying.
FLYING INSTRUCTIONS
There's a normal glide. You're ready to light up the jet fuse for power flight.
If it does this . . . it's stalling. Bending tabs down will straighten glide path.
Hold the model with its nose pointed downward slightly. Then give it a gentle forward push.
Use ½" x 1½" cellulid tabs scotch taped to stabilizer trailing edge to trim out any tendency to stall (diving) tendency. Bend tabs up to eliminate dive. A tab of same size may be used on rudder for glide turn if desired.
TRIM AND SAND RUDDER TO A STREAMLINE SECTION.
F30R
F29R
W10
W9
W12
W11
F29L
F28R
F28L
TOP VIEW
BLUE
WHITE
RED
COLOR INSIGNIA, CUT FROM PLAN AND ATTACH TO MODEL.
CEMENT
CROSS SECTION THRU CABIN
SAND TO HEAVY LINE
C1
CABIN BLOCK
C2
1/8" C3
1/16" C3
C2
WING SPAR
WING SPAR
REAR STUB SPAR
FRONT STUB SPAR
FRONT STUB SPAR
REAR STUB SPAR
CUT STUB SPAR OUTLINES FROM PLAN. ATTACH TO 1/16" SHEET BALSA AND CUTOUT.
LEADING EDGE 1/8" SQ.
ATTACH INSIGNIA TO TOP OF LEFT WING.
SPAR (TAPER AS SHOWN) 1/16" X 9/32"
DOWEL STOP
FRONT STUB SPAR
W7
W5
W3
W4
W8
W6
DOWEL STOP
REAR STUB SPAR
ATTACH INSIGNIA TO BOTTOM OF RIGHT WING.
W2
W1
TRAILING EDGE 1/8" X 1/2"
FLAP SEPARATION
AILERON SEPARATION
TRIM TO SIDE AND TOP VIEW OUTLINE THEN BLEND INTO CABIN WITH SANDPAPER.
1. CEMENT 1/16" C3 AND 1/8" C3 TOGETHER.
2. ATTACH PARTS C2 TO C1 (WITH 1/16" C3 SPACER BETWEEN OPENING) AND CEMENT C3 AT TOP TO FORM HOLLOW STRUCTURE.
3. CEMENT BALSA BLOCK AT REAR AS SHOWN.
4. WRAP SANDPAPER AROUND SMALL DOWEL AND SAND AWAY EXCESS AT WINDOWS.
5. SAND ENTIRE CABIN SMOOTHLY TO SHAPE AND TRIM BOTTOM FLUSH. PAINT WITH COLOR DOPE. THEN ATTACH CELLULOID WINDOWS.
Use Comet Cement and Dope for Best Results
LEADING EDGE 1/8" SQ.
SPAR 1/8" SQ.
E2
E1
TRAILING EDGE 1/8" X 1/2"
ELEVATOR SEPARATION
R3
R2
SPARS AND RIBS 1/8"x1/8"
TRAILING EDGE 1/8" X 1/2"
RUDDER SEPARATION
R4
R1
R6
R5
CABIN BLOCK
RUDDER PLATFORM 1/16"X 1/4" STRIP
F12
F13
F22
F23
F24
F14
F18
JETEX AUGMENTER TUBE
F16
F17
F32
F31
F30
F29
JETEX 150 ENGINE WITH MOUNT.
F27
WING POSITION
F28
F26L
F34
F33
L1
1/8" SQ. STRUT STOP
HINGE NOSE GEAR DOOR TO F26R WITH CLOTH HINGES
L2
LOCATION OF DOOR POSITIONER TUBE.
CUT DOWEL TO CORRECT SIZE AND CEMENT FIRMLY TOGETHER AS SHOWN. BIND WIRE TO STRUT AND WRAP PAPER STRIP MADE LEFT AND RIGHT.
CEMENT SKIN
1/8" DOWEL
POSITIONER
CUT GROOVE FOR WIRE
MAIN LANDING GEAR LEG
BEND MAIN GEAR DOOR POSITIONER FROM STIFF WIRE AND WRAP WITH PAPER TO FORM TUBE. CEMENT TO LANDING GEAR DOOR.
ATTACH TO STRUT
HINGE TO DOOR
MAIN GEAR DOOR POSITIONER (MAKE TWO).
MAIN GEAR WIRE
NOSE LANDING GEAR LEG
NOSE GEAR WIRE
MAKE NOSE GEAR IN SAME MANNER AS MAIN GEAR.
DOOR POSITIONER
NOSE GEAR DOOR
MAIN GEAR DOOR
DIHEDRAL ANGLE
FRONT VIEW
COMET
DOUGLAS D558-1 "SKYSTREAK"
SPAN 17 INCHES
LENGTH 23 13/16 INCHES
KIT NO. P11
DESIGNED AND DRAWN BY Douglas S. Mallory
COPYRIGHT 1953 BY COMET MODEL HOBBYCRAFT INC. CHICAGO
DOUGLAS SKYSTREAK KIT NO. P11
SHEET NO. 5 1/8"
W2
C4
R3
R2
W1
R4
C2
C3
F2L
F2R
F1R
F1L
F33
L1
F34
NOTE: 1/8" BALSA
NOTE: 1/16" BALSA
DOUGLAS SKYSTREAK KIT NO. P11 SHEET NO. 1
M1
M2
R5
F25
F25L
F25R
R4L
R4R
F31R
F22
F31L
C4
C1
L2
W3
W4
W8
W7
DOUGLAS SKYSTREAK KIT NO. P11 SHEET NO. 3 1/16"
F30R
F23
F29L
F9 POSITION
F14R
F29R
F13
F14L
F9
F31R
F31L
F32R
F32L
F28R
F28L
F26R
F26L
F27R
F27L
DOUGLAS SKYSTREAK KIT NO. P11 SHEET NO. 4 1/16"
F13
F31R POS.
F31L POS.
CUT AWAY SHADED SECTION
F9
F29R POS.
F29L POS.
F14L
F14R
STUB SPAR POSITION
F28R
F28L
F26R
F26L
F27R
F27L
JET NOZZLE
DOUGLAS SKYSTREAK KIT NO. P11 SHEET NO. 2 1/16"
F29R
F9 POSITION
F29L
F27
F24
STOP
STOP
STOP
STOP
F30L