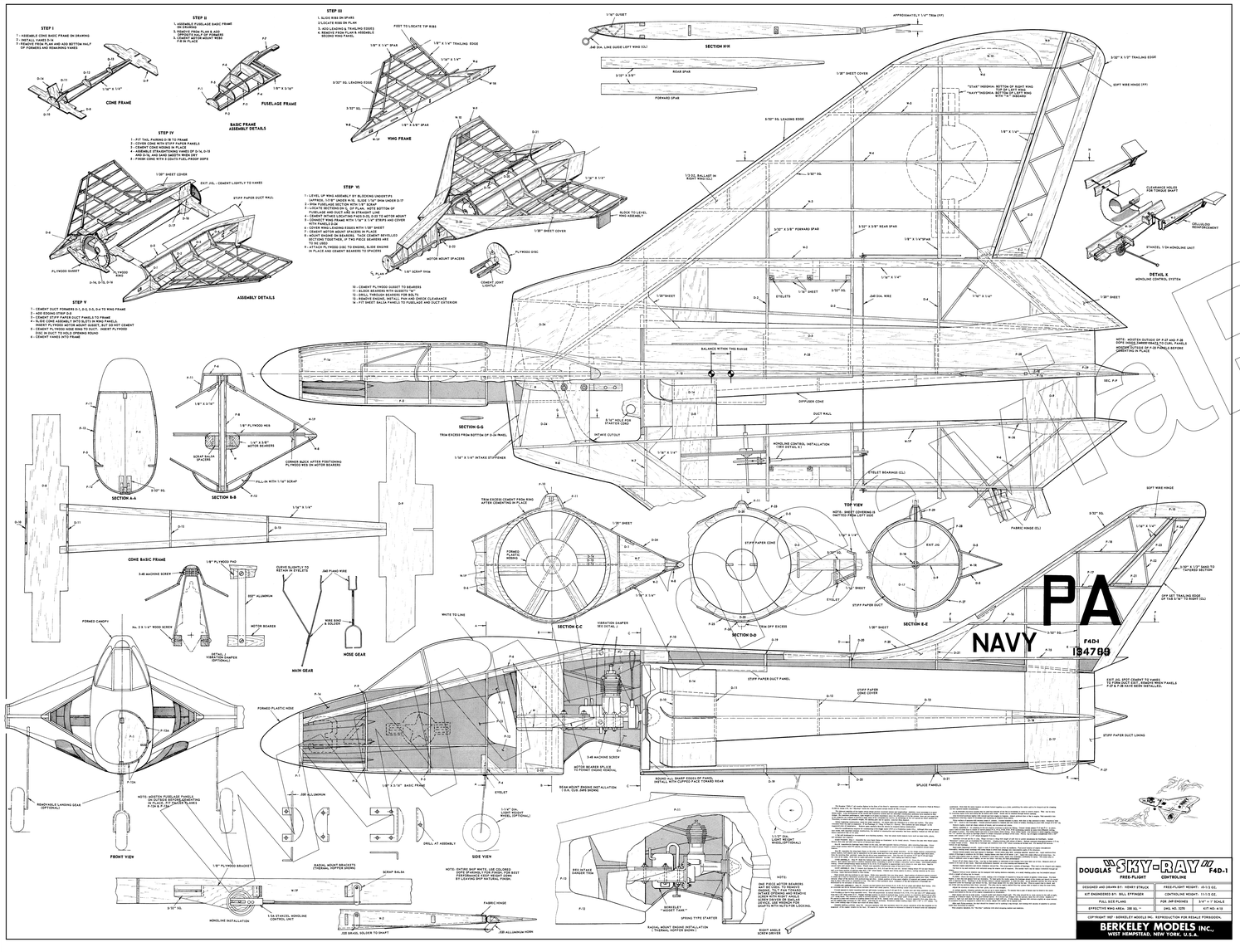
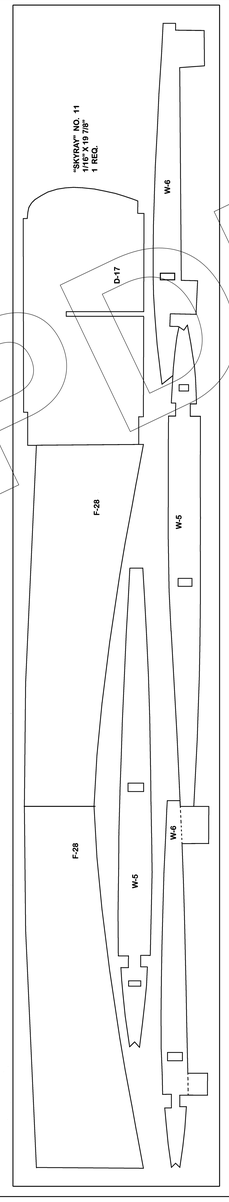
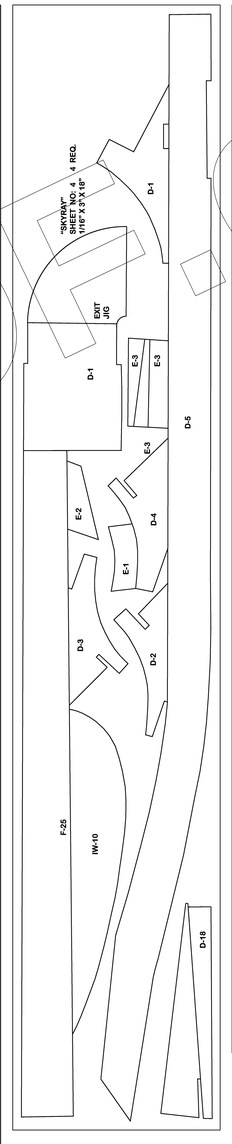
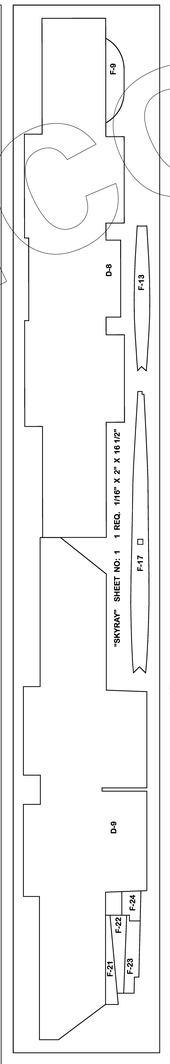
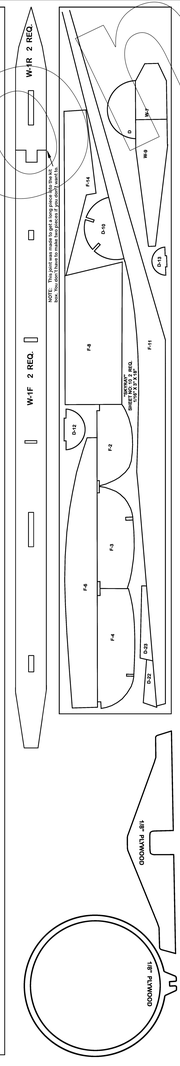
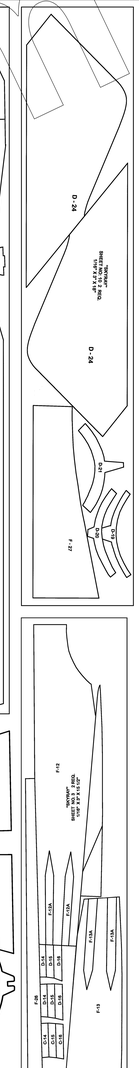

STEP I
1 - ASSEMBLE CONE BASIC FRAME ON DRAWING
2 - INSTALL VANES D-14
3 - REMOVE FROM PLAN AND ADD BOTTOM HALF OF FORWARD AND REMAINING VANES
CONE FRAME
STEP II
1. ASSEMBLE FUSELAGE BASIC FRAME ON DRAWING
2. REMOVE FROM PLAN & ADD FORWARD & REMAINING FRAMES
3. CRANKY MOTOR MOUNT NEEE F-9 ON PLACE
FUSELAGE FRAME
BASIC FRAME ASSEMBLY DETAILS
STEP III
1. SLIDE RIBS ON SPARS
2. LOCATE RIBS ON PLAN
3. ADD LEADING & TRAILING EDGES
4. REMOVE FROM PLAN & ASSEMBLE SECOND WING PANEL
FOOT TO LOCATE TIP RIBS
WING FRAME
STEP IV
1 - FIT TAIL FAIRING D-18 TO FRAME
2 - COVER CONE WITH STIFF PAPER PANELS
3 - CEMENT CORE MOUNT IN PLACE
4 - CEMENT PLYWOOD GUSSETS OF D-14, D-15 AND D-16, AND SAND SMOOTH WHEN DRY
5 - FINISH CONE WITH 3 COATS FUEL-PROOF DOPE
EXIT JIG. - CEMENT LIGHTLY TO VANES
STIFF PAPER DUCT WALL
PLYWOOD GUSSET
PLYWOOD RING
ASSEMBLY DETAILS
STEP V
1 - CEMENT DUCT FORWARD D-1, D-2, D-3, D-4 TO WING FRAME
2 - ADD SIDING STRIP D-8
3 - CEMENT STIFF PAPER DUCT PANELS TO FRAME
4 - CEMENT STIFF PAPER DUCT PANELS TO SIDE PANELS, INSERT PLYWOOD MOTOR MOUNT GUSSET, BUT DO NOT CEMENT
5 - CEMENT PLYWOOD NOSE RING TO DUCT. INSERT PLYWOOD DISC IN DUCT TO HOLD OPENING ROUND
6 - CEMENT VANES INTO FRAME
STEP VI
1 - LEVEL UP WING ASSEMBLY BY BLOCKING UNDERTIPS
2 - CEMENT WING TO FUSELAGE, BLOCK UP WING UNDER D-17
3 - DRIL FUSELAGE SECTION WITH 1/8" SCRAP
4 - LOCATE SECTIONS D4, D5 OF PLAN. NOTE BOTTOM OF D-5 IS 1/8" ABOVE BOTTOM OF FUSELAGE
5 - CEMENT SCRAP LOCATING PADS (D-5) DUE TO MOTOR MOUNT
6 - CONNECT WING FRAME WITH 1/16" X 1/8" STRIPS AND COVER WITH SHEET
7 - COVER WING LEADING EDGES WITH 1/32" SHEET
8 - CEMENT MOTOR MOUNT SPACERS IN PLACE
9 - CEMENT TOP SHEET TO WING, SHAPE TRAILING EDGE
10 - SECTIONS TOOK THIS, IN THE PIECE BEARERS ARE TO BE USED
11 - ATTACH PLYWOOD DISC TO ENGINE, SLIDE ENGINE IN PLACE AND CEMENT BEARERS TO SPACERS
12 - CEMENT PLYWOOD GUSSET TO BEARERS
13 - BLOCK TO LEVEL WITH SUPPORTS
14 - DRILL THROUGH BEARERS FOR BOLTS
15 - REMOVE ENGINE, INSTALL PAN AND CHECK CLEARANCE
16 - FIT SHEET BALSA PANELS TO FUSELAGE AND DUCT EXTERIOR
SECTION H-H
SECTION G-G
SECTION A-A
SECTION B-B
CONE BASIC FRAME
SECTION C-C
SECTION D-D
SECTION E-E
TOP VIEW
FRONT VIEW
SIDE VIEW
MAIN GEAR
NOSE GEAR
DETAIL X
MONOLINE CONTROL SYSTEM
PA
NAVY
F4D-1
134789
DOUGLAS "SKY-RAY" F4D-1
FREE-FLIGHT
CONTROLINE
DESIGNED AND DRAWN BY: HENRY STRUCK
KIT ENGINEERED BY: BILL STIPINGER
FULL SIZE PLANS
EFFECTIVE WING AREA: 288 SQ. IN.
FREE-FLIGHT WEIGHT: 18-1/2 OZ.
CONTROLINE WEIGHT: 11-1/2 OZ.
FOR .049 ENGINES
3/4" = 1" SCALE
DWG. NO. 5270
KIT NO. K-19
COPYRIGHT 1957 - BERKELEY MODELS INC. REPRODUCTION FOR RESALE FORBIDDEN.
BERKELEY MODELS INC.,
WEST HEMPSTEAD, NEW YORK, U.S.A.


"SKYRAY" NO. 11
1/16" X 19 7/8"
1 REQ.
"SKYRAY"
SHEET NO. 4
1/16" X 2" X 16"
4 REQ.
W-6
D-17
F-28
W-5
W-6
F-28
W-5
W-6


D-1
EXIT JIG
D-1
E-3
E-3
D-5
E-3
E-2
D-4
E-1
D-3
D-2
F-25
IW-10
D-18


F-9
D-8
F-13
"SKYRAY" SHEET NO: 1 1 REQ. 1/16" X 2" X 16 1/2"
F-17
D-9
F-22
F-24
F-21
F-23


W-1R 2 REQ.
W-1F 2 REQ.
NOTE: This point was made to get a long piece like this in. Make two, cement together and sand to shape as shown.
"SKYRAY" SHEET NO. 2 1/16" X 2" X 4 REQ.
F-6
F-11
F-2
F-3
F-4
F-4
G-20
G-21
DOUGLAS JET


K-1
K-2
K-3
K-4
K-5
K-6
K-7
K-8
K-9
K-10
K-11
K-12
K-13
K-14
K-15
K-16
K-17
K-18
K-19
K-20
K-21
K-22
K-23
K-24
K-25
K-26
K-27
K-28
K-29
K-30
K-31
K-32
K-33
K-34
K-35
K-36
K-37
K-38
K-39
K-40
K-41