Place on WHITE SIDE of
hinge material. (Make 2)

RUDDER
(Make 4)

TUBE MARKING GUIDE

around · Fin · Launch Lug · Fin · Wrap

Artist's Loft™

0 INCH 1 2 3 4 5 6 7 8

30 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10

← GRAIN →

FIN PATTERN
(Make 2)

FLAP PATTERN
(Make 2)
← GRAIN →

Artist's Loft™

0 INCH 1 2 3 4 5 6 7 8

30 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10

FLAP HOLDER
(Make 2)
PATTERN
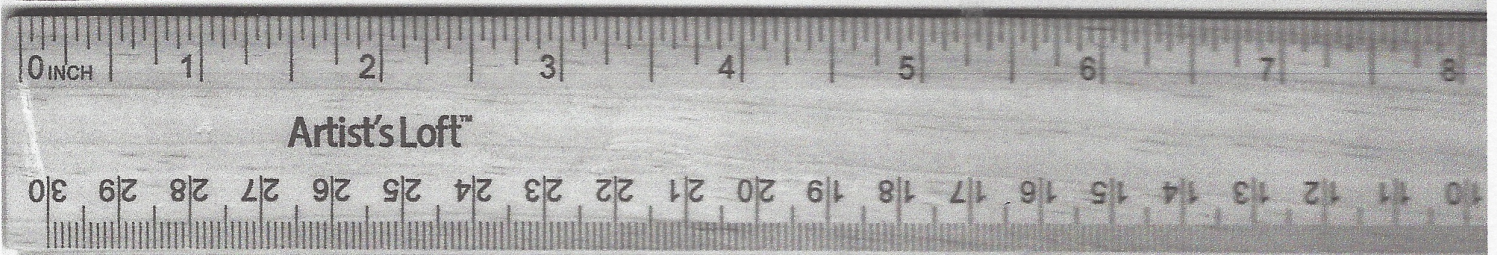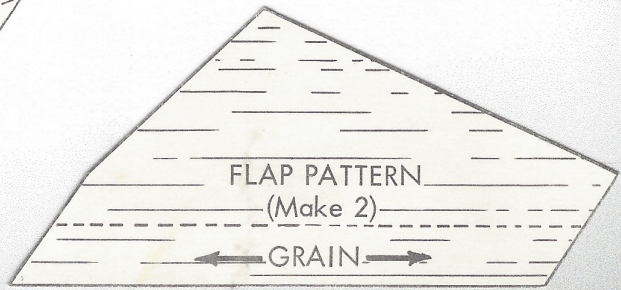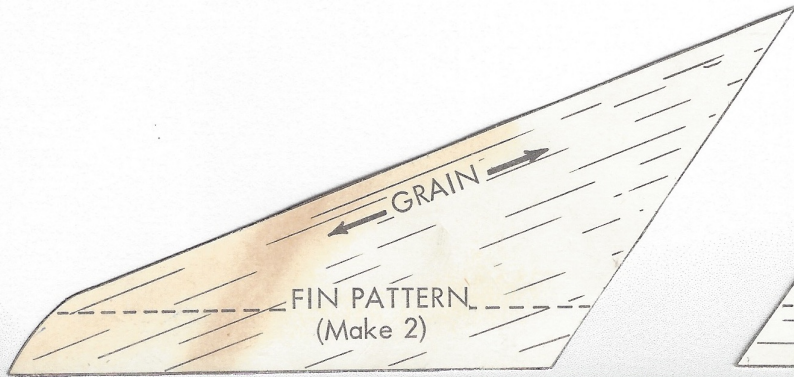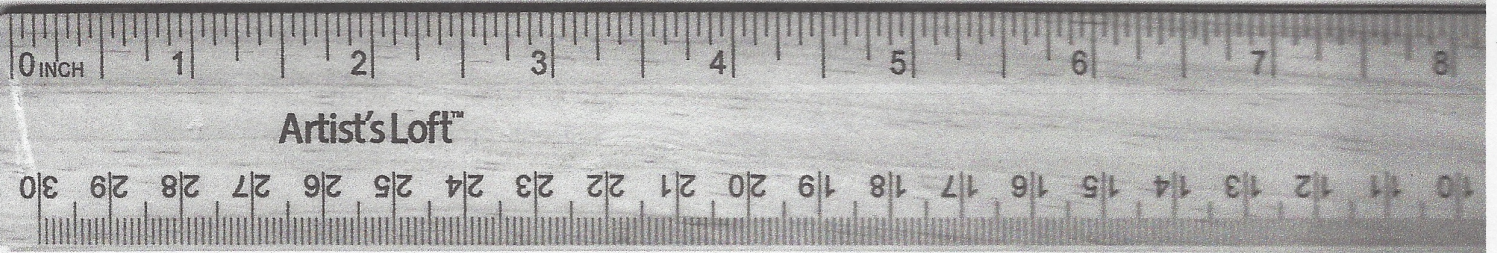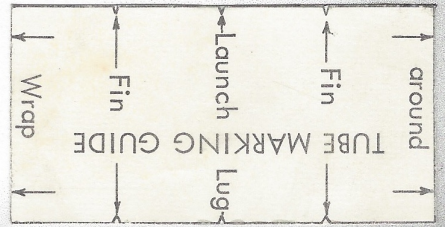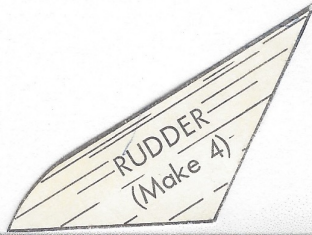
PATTERN SHEET
SP-24

K-24 GYROC

STEP 6

☐ Step 6.   Apply glue to the fin part of one assembly and place on a fin guide line. Sight down the side of the body tube making sure the fin is placed in line with the center-line of the tube and sticks straight out from the tube. Allow the glue to set. Attach the other fin-flap assembly in the same way. Set the rocket on its nose while the glue dries. Trim the launching lug if desired and glue it into place as shown.

Align carefully

Trim if desired

Apply glue

Apply glue and attach

Rudder

Tube marking guide with edge placed parallel to the body tube.
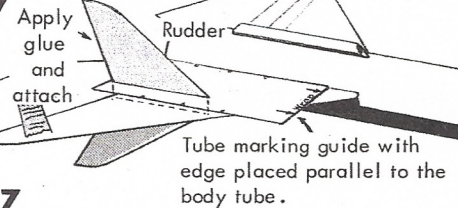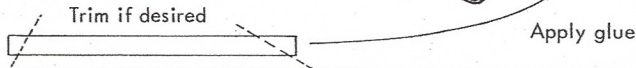
STEP 7

☐ Step 7.   Use the tube marking guide as shown to glue the rudders into position. Place them to stick straight away from the fin on either side. (See the rear view of the general layout illustration.)
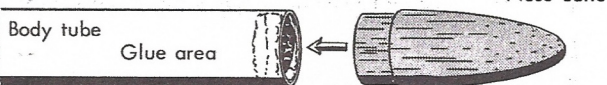
STEP 8

☐ Step 8.   Place an engine casing into the body tube. Apply glue to a hardwood tab and put the tab on the flap on the side opposite the hinge. As shown, position the tab with the square side just touching the engine casing. Apply the other tab in the same way. View your model from the rear and compare the rear view of the general layout with it.

Tab just touches the engine case

Tab
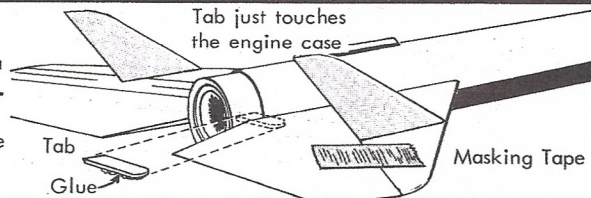
Glue

Masking Tape

STEP 9

☐ Step 9.   Glue the nose cone into place.

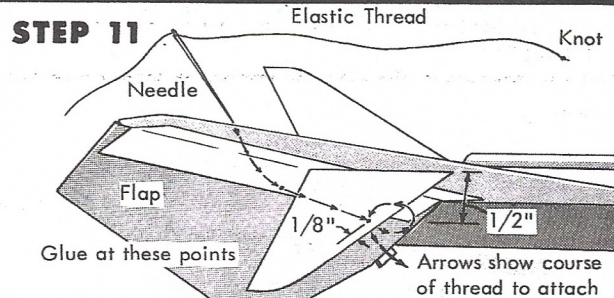Nose cone
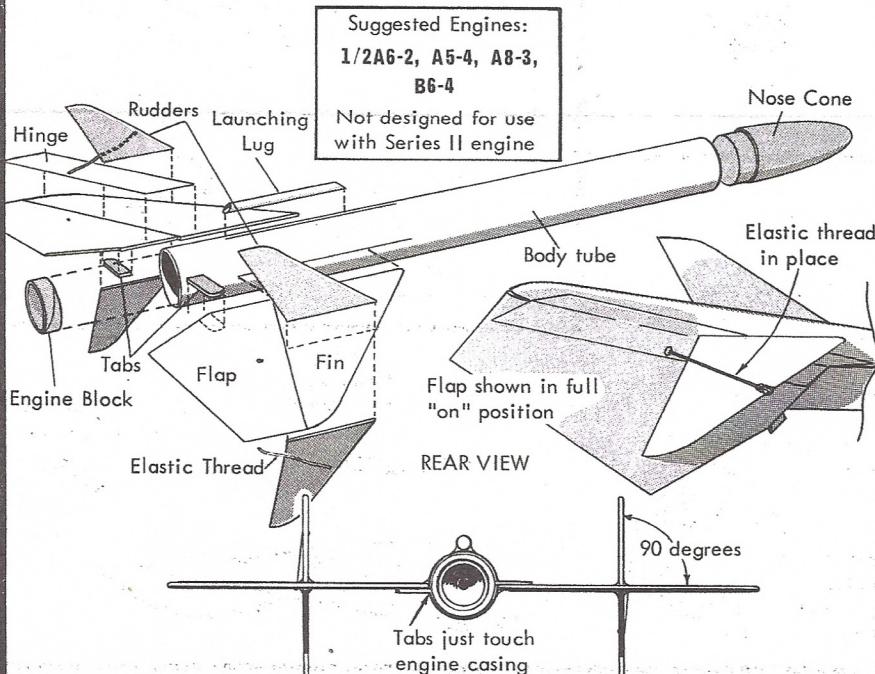
Body tube

Glue area

STEP 10

Remove masking tape

☐ Step 10.   Remove the masking tape from the fin-flap joint. PAINT the model the color(s) of your choice. The elastic thread is installed as the last construction step.

☐ Step 11.   Thread the elastic thread through the eye of the needle, and knot the other end of the thread. Hold one flap against its rudder and push the needle through the flap from the back. The needle point should come out through the hinge 1/16" from its rear edge. Draw the elastic thread through until the knot is seated against the flap. Apply a touch of glue to the knot side forcing just enough glue through the hold to appear on the hinge side. Allow this glue to set. Locate a point 1/2" up from the root edge and 1/8" back from the leading edge of the rudder. Push the needle through and draw the thread tight enough to pull the flap from a straight position to full flap position. Apply glue as you did on the flap and hold the elastic thread in this position until the glue appears firmly set.
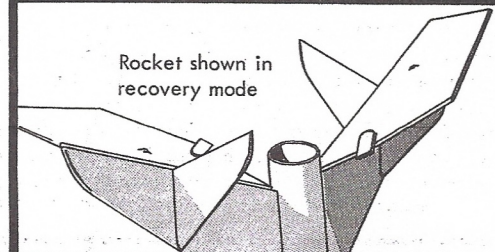
STEP 11

Elastic Thread

Knot

Needle

Flap

Glue at these points

1/8"

1/2"

Arrows show course of thread to attach

GENERAL   LAYOUT

Suggested Engines:

1/2A6-2, A5-4, A8-3, B6-4

Not designed for use with Series II engine

Hinge

Rudders   Launching Lug

Nose Cone

Elastic thread in place

Body tube

Tabs

Flap

Fin

Engine Block

Elastic Thread

Flap shown in full "on" position

REAR VIEW

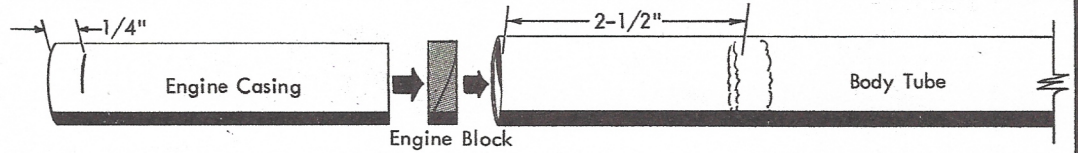90 degrees

Tabs just touch engine casing

COUNTDOWN ✓ LIST

☐ 10   Select an engine and insert an igniter following the instructions that came with the engines.

☐ 9   Hold flaps in their neutral position and slide the engine into place. No tape is needed -- just release the flaps.

☐ 8   Place the rocket on the launcher. Clean and attach the clips to the igniter leads.

☐ 7   Clear the area, check for low flying aircraft, alert recovery, timer, and tracking crews.

☐ 6   Arm the launch-controller and check continuity.

☐-5- ☐-4- ☐-3- ☐-2- ☐-1- LAUNCH!

Rocket shown in recovery mode

ASSEMBLY

STEP 1

1/4" Engine Casing → Engine Block → 2-1/2" Body Tube

☐ Step 1. Mark an engine casing 1/4" from one end for use as a depth guide. Apply glue to the inside of one end of the body tube at a depth of 2-1/2". Insert the engine block into this end and press it into place with the marked engine casing.
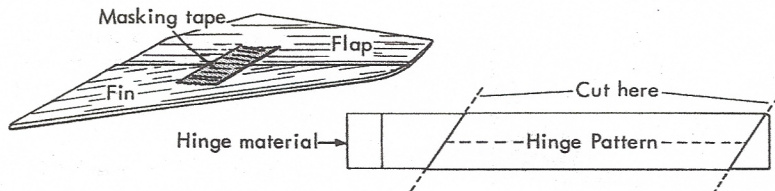
STEP 3

Hardwood — Tab pattern — Sand at angle
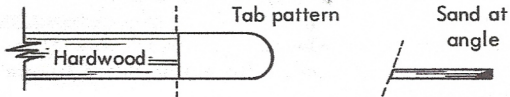
☐ Step 3. Cut out the flap holder pattern and from the hardwood piece, cut two holders. Sand the square edge to a slight angle as shown. Set aside for later installation.

STEP 4

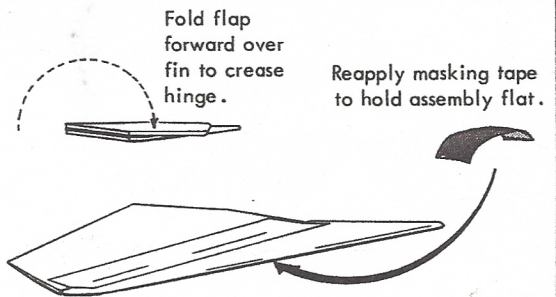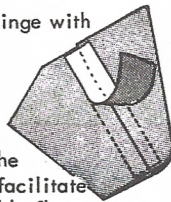3/4" Body tube

Tube marking Guide

Mark and extend lines
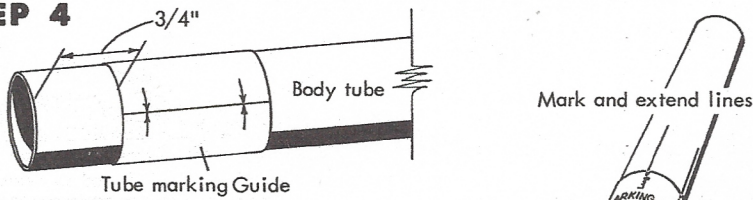
☐ Step 4. Cut out the tube marking guide and wrap it around the rear of the body tube 3/4" from the end. Match the end arrows carefully and mark the body tube at both fin and launching lug notches. Remove the guide and connect the marks with a straight line. Carry all lines toward the front end of the tube at least 3" as is shown. (Save the guide. It will be used later.)

STEP 2

☐ Step 2. Cut the rudder, fin, and flap patterns from the pattern sheet. Lay out fin and flap patterns first as shown then the rudder pattern. Trace around each with a ball point pen. Cut out and sand all the parts as shown.

Fin Stock

Hinge Joint
Root Edge
Fin
Sand root edges and hinge joints flat.

Sand all edges so marked, round.

Flap
Hinge joint

Root Edge
Rudder

STEP 5

Masking tape
Flap
Fin

Hinge material → Cut here — Hinge Pattern —

Apply hinge with care.

Fold flap forward over fin to crease hinge.
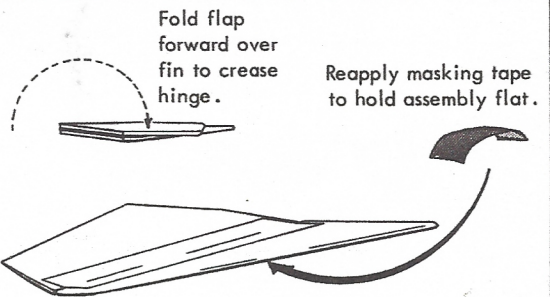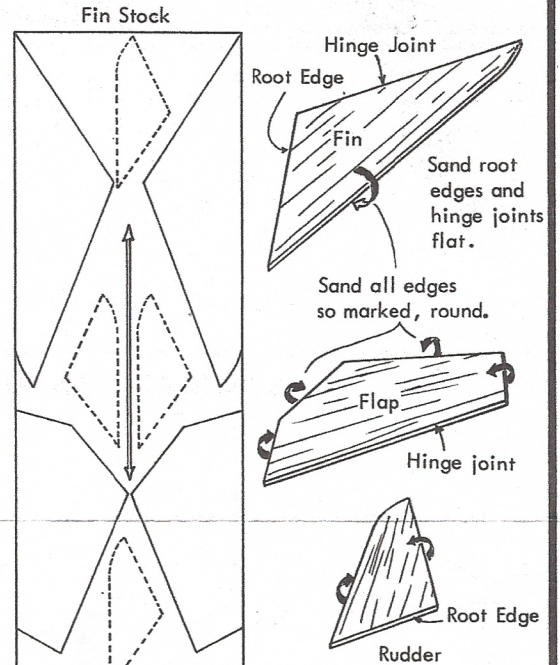
Reapply masking tape to hold assembly flat.

☐ Step 5. Tape the fins and flaps together as shown. Cut out the hinge pattern and cut one hinge from each piece of material provided. Strip the backing paper from a hinge piece and apply it as shown. Do the same to the other hinge and fin-flap assembly. Remove the masking tape and bend the flap back flat against the fin to crease the hinge. The flap will stay bent slightly. To facilitate handling, replace the piece of masking tape to hold the assembly flat.

Astron GYROC

K-24
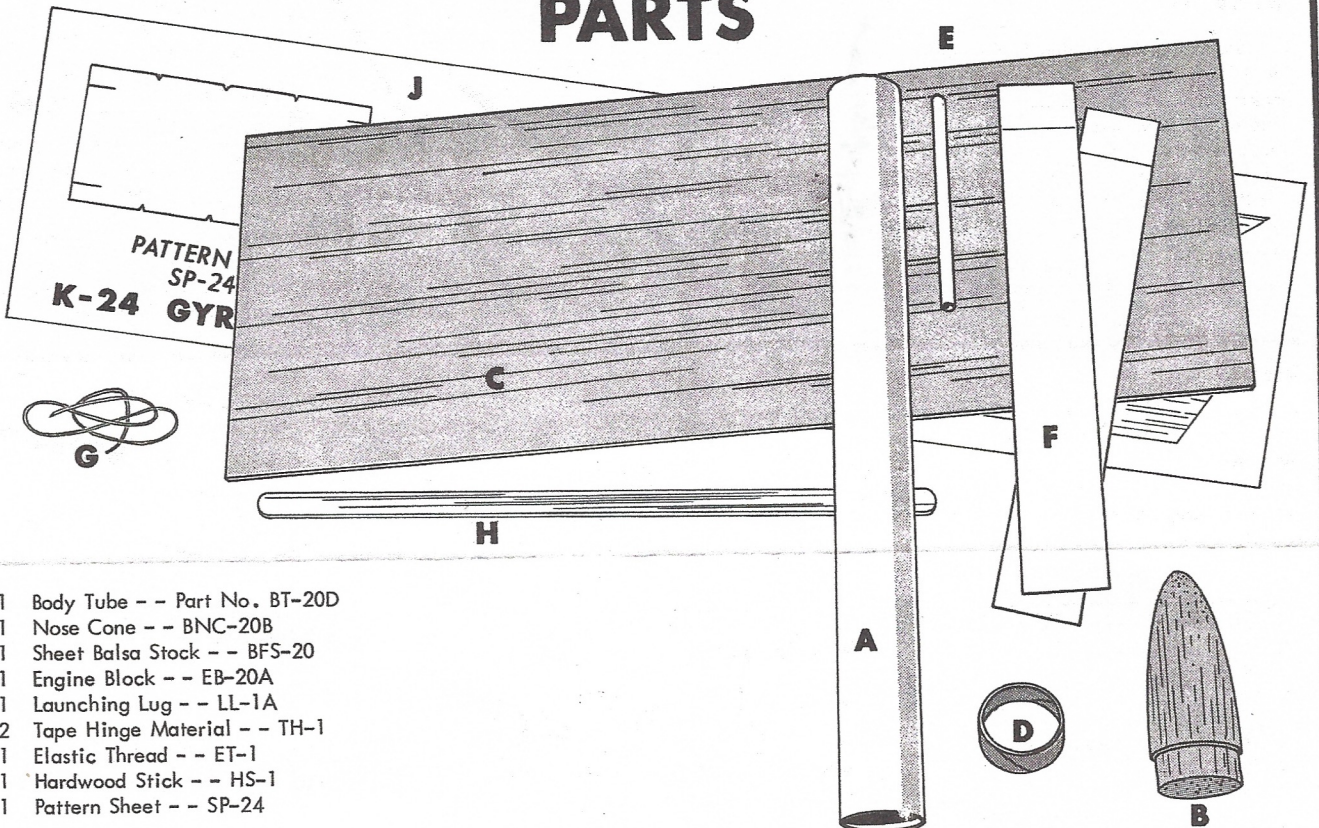
HELICOPTER RECOVERY

RECOMMENDED ENGINES
1/2A6-2, A5-4, A8-3, B6-4

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PARTS

A	1	Body Tube -- Part No. BT-20D
B	1	Nose Cone -- BNC-20B
C	1	Sheet Balsa Stock -- BFS-20
D	1	Engine Block -- EB-20A
E	1	Launching Lug -- LL-1A
F	2	Tape Hinge Material -- TH-1
G	1	Elastic Thread -- ET-1
H	1	Hardwood Stick -- HS-1
J	1	Pattern Sheet -- SP-24