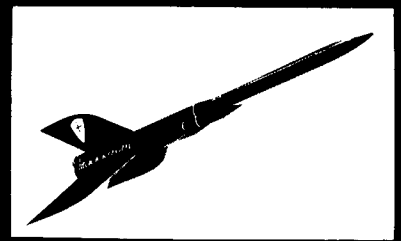


Estes Industries Rocket Plan No. 71 BLACK KNIGHT

JAN. '70

DESIGN OF THE MONTH WINNER
by Joseph Aitken, APO San Francisco, Calif.



PUBLISHED AS A SERVICE TO ITS CUSTOMERS BY ESTES INDUSTRIES, INC., BOX 227, PENROSE, CO. 81240

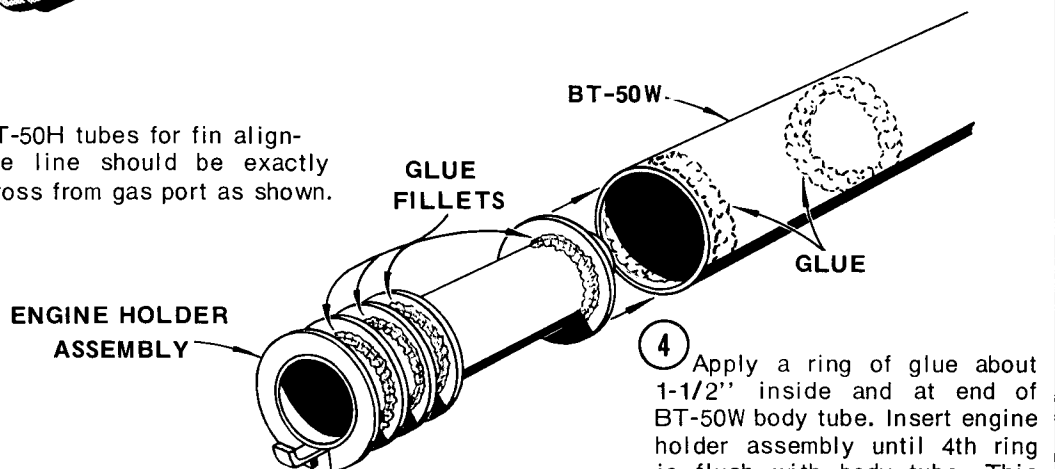
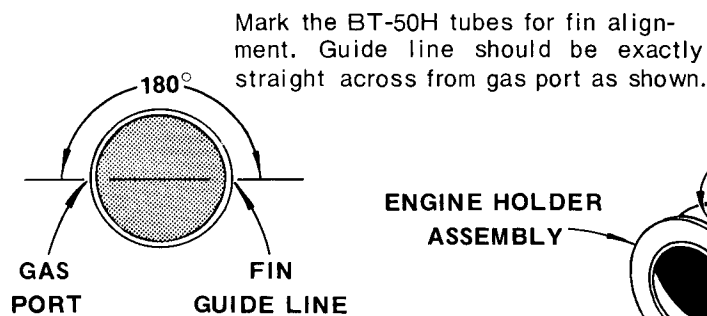
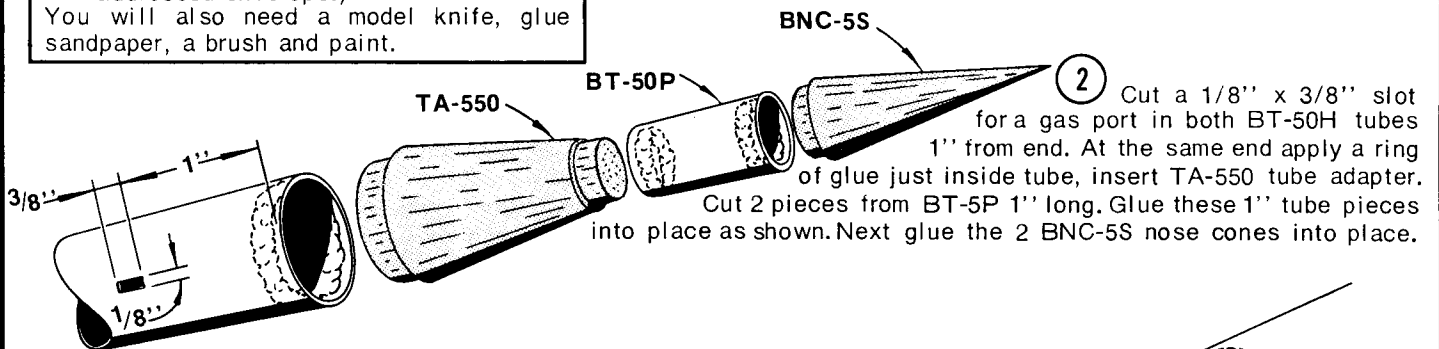
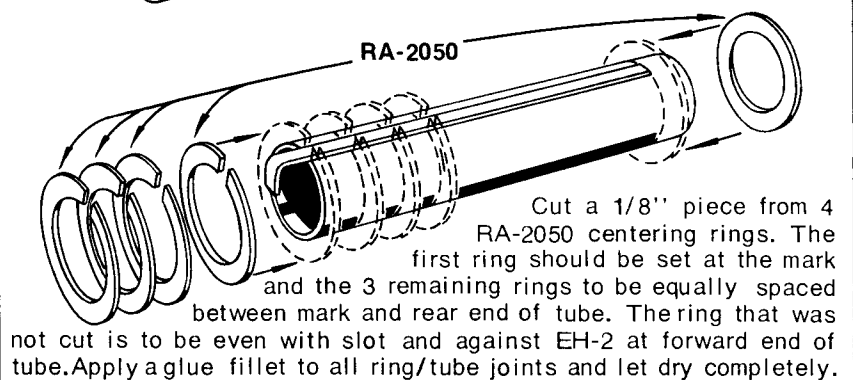
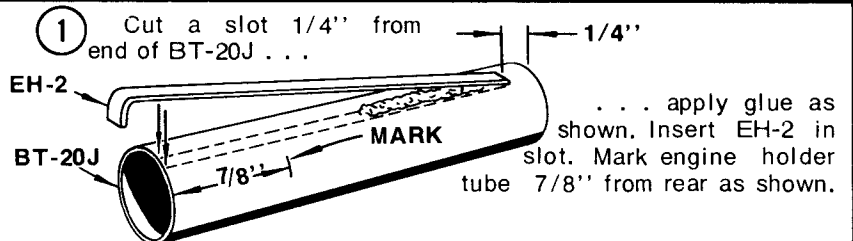
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PARTS LIST

1	Body Tube	BT-50W
2	Body Tubes	BT-50H
1	Body Tube	BT-20D
1	Body Tube	BT-20J
1	Body Tube	BT-5P
1	Nose Cone	BNC-20N
2	Nose Cones	BNC-5S
1	Tube Adapter	TA-2050A
2	Tube Adapters	TA-550
2	Nose Blocks	NB-50
3	Fin Stock	BFS-20
1	Engine Holder	EH-2
5	Centering Rings	RA-2050
2	Parachute Kits	PK-8
2	Screw Eyes	SE-3
2	Shock Cords	SC-1
2	Snap Swivels	SV-12
1	Launching Lug	LL-2B
3	Nose Cone Weights	NCW-2
1	Fin Pattern Sheet	FP-1-71

(Fin pattern will be sent free with order if requested, or send a stamped self-addressed envelope.)

You will also need a model knife, glue sandpaper, a brush and paint.



3 Copy fin pattern from pattern sheet onto BFS-20 observing grain direction. Cut fins out and sand all leading and trailing edges round,

4 Apply a ring of glue about 1-1/2 inch inside and at end of BT-50W body tube. Insert engine holder assembly until 4th ring is flush with body tube. This should be done in one smooth motion or the assembly may freeze in the wrong position.

5 Mark the BT-50W body tube at 120° for 1/8" x 3/8" gas ports and rudder. Gas ports to be 2-11/16" from front of tube.
Use the marking guide in the Technical Section of your ESTES catalog.

6 Glue tube adapter TA-2050 and body tube BT-20D into place as shown. Do not glue nose cone BNC-20N if payload is desired.

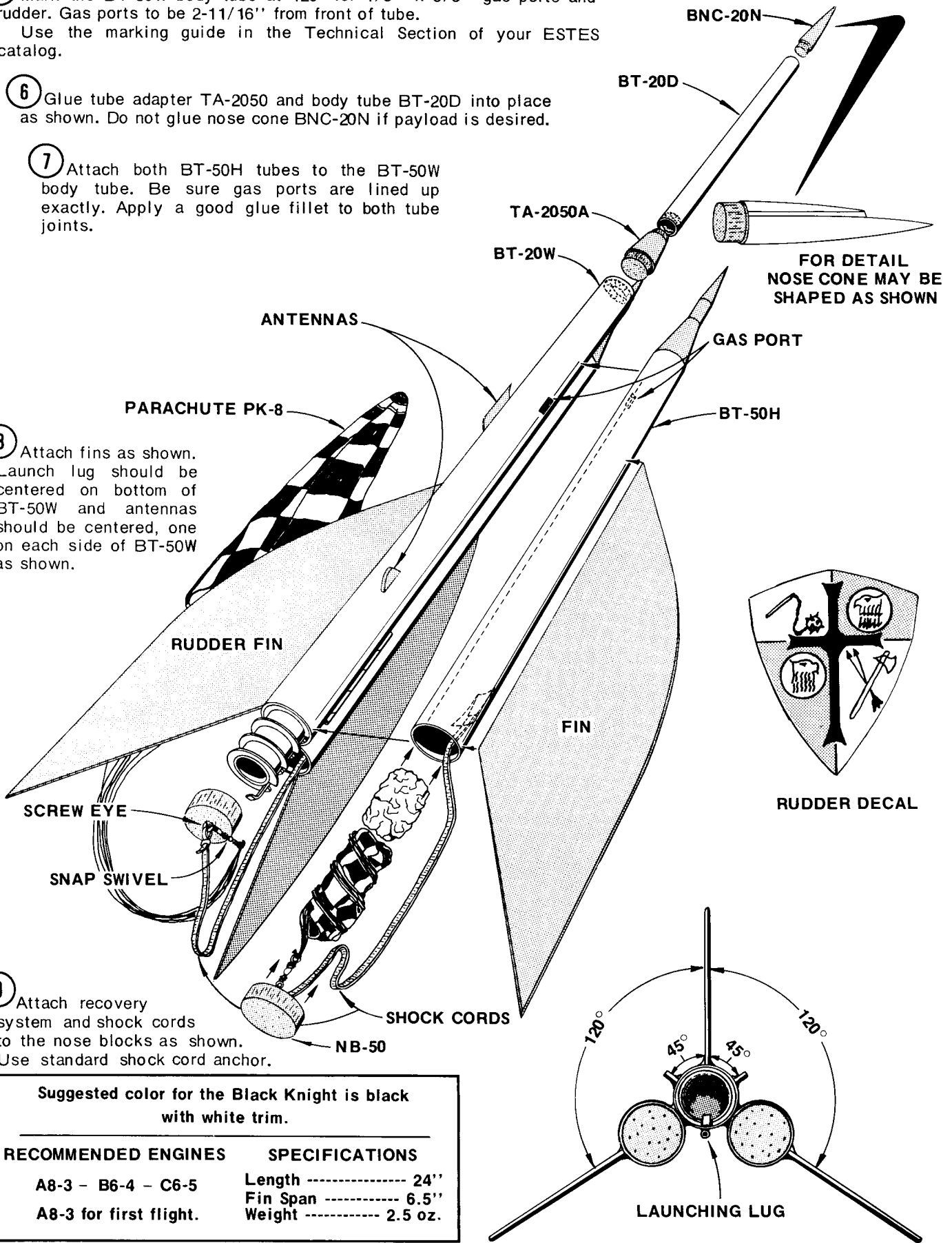
7 Attach both BT-50H tubes to the BT-50W body tube. Be sure gas ports are lined up exactly. Apply a good glue fillet to both tube joints.

8 Attach fins as shown. Launch lug should be centered on bottom of BT-50W and antennas should be centered, one on each side of BT-50W as shown.

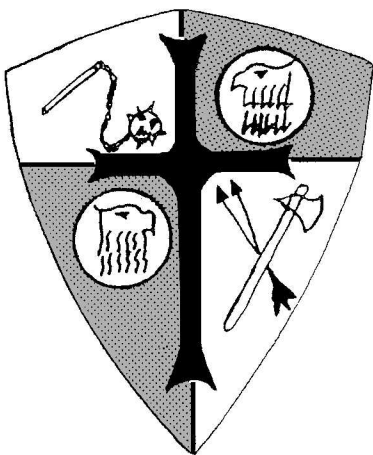
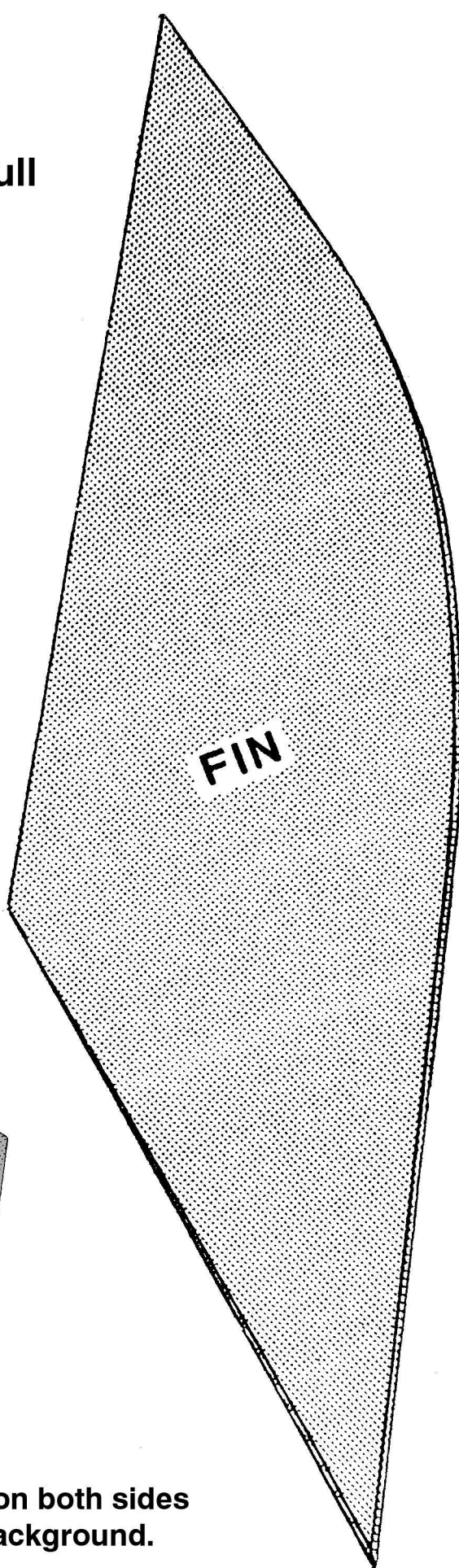
9 Attach recovery system and shock cords to the nose blocks as shown. Use standard shock cord anchor.

Suggested color for the Black Knight is black with white trim.

RECOMMENDED ENGINES	SPECIFICATIONS
A8-3 - B6-4 - C6-5	Length ----- 24"
A8-3 for first flight.	Fin Span ----- 6.5"
	Weight ----- 2.5 oz.



**Black Knight
Fin Template - Full
Size**

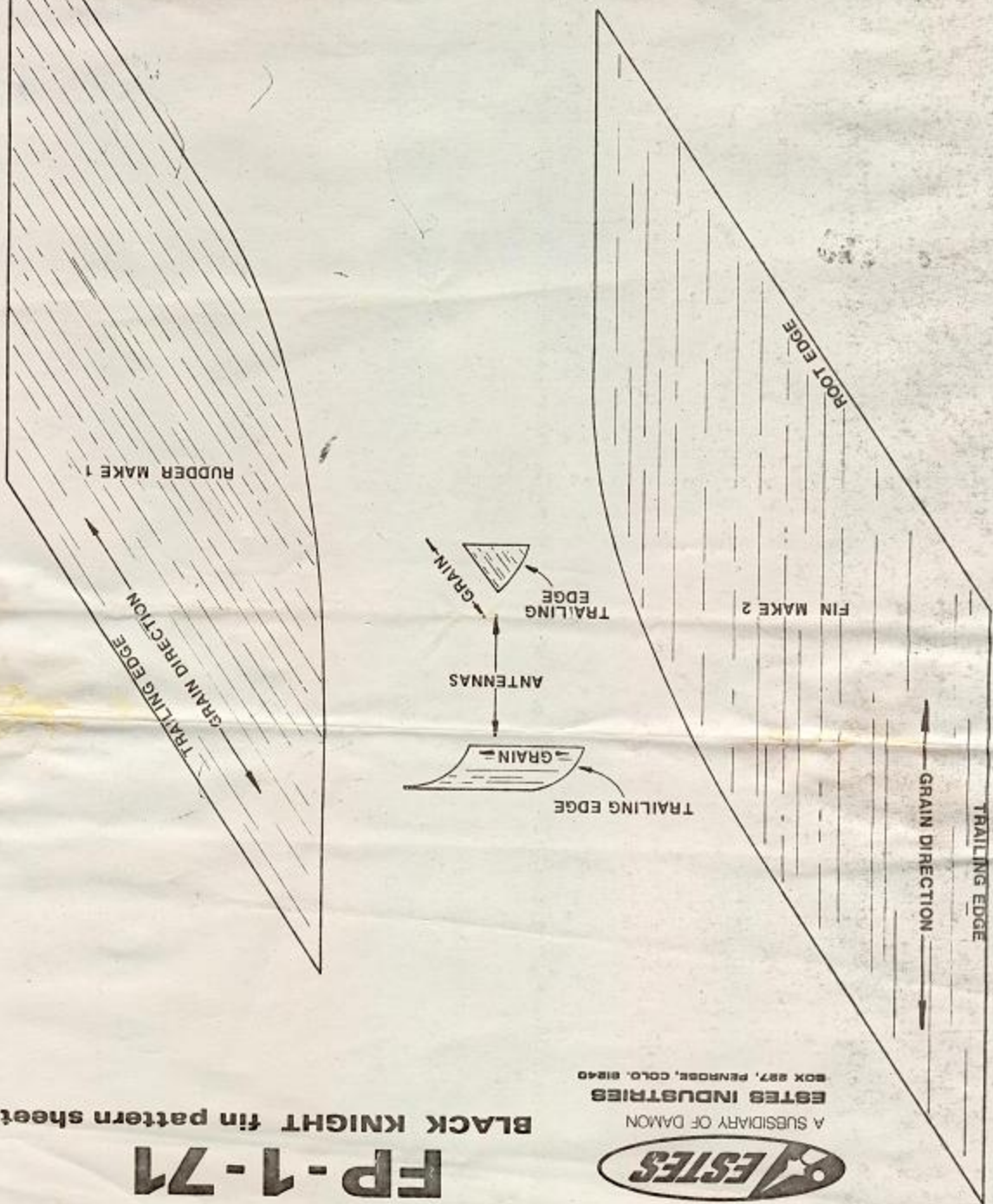


**Decal: Make 2 and place on both sides
of one fin. Use white background.**

BLACK KNIGHT fin pattern sheet

FP-1-71

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Sand all leading and trailing edges round and all root edges flat.