

Red-Eye ™				
Kit No. KV-72				
Specifi Body Diameter Length Fin Span Net Weight	cations 0.759" (1.9 cm) 9.0" (22.9cm) 12.6" (32.0 cm) 0.3 oz. (11.3 g)	Engine 1/2A3-2T A10-3T A3-4T	Approx. Altitude 150' 225' 275'	
GYRO & STREAMER RECOVERY				

About the Red-Eye™

The Red-Eye was released in 1980 by Centuri Engineering Company as the enemy satellite for their new Satellite Killer. Both of these models were a part of their "War in Space" series. Since these were done in the final days of Centuri as a separate company from Estes Industries, there were no later entries. The Red-Eye was an "upscale" of the earlier Satellite 62SL and used the same fiber fin sheets, using only three of the original fins. The 62SL used all four. It was released as Catalog Number 5346 and had an introductory price of \$2.00.

The Retro-Repro[™] Red-Eye[™] is updated with laser-cut fins. The original plastic nose cone is replaced with balsa. The engine mount is added to work with a wide range of "T" mini-engines instead of a standard 1/2A6 engine with a steamer placed inside the engine. The original foil decals are used instead of waterslide decals.

About Centuri Engineering Company

Centuri Engineering Company was started in 1961 by Leroy (Lee) Piester in his garage while he was still in college in Phoenix, Arizona. With his wife, Betty, they built Centuri into one of the largest model rocket companies ever.

Centuri was known for its unusual and innovative designs, producing over 140 different kits with something for every model rocketeer. They also produced model rocket engines and pioneered the modern composite high powered engines with their Enerjet line.

Centuri Engineering was sold to Damon in the late 1960's and shared the same parent corporation with Estes Industries, the largest model rocket company in the world. The Centuri product line was kept separate from the Estes line until 1983. A few of the old kits have been reissued by Estes since then, but for the most part, Centuri Engineering Company lives today only in the dreams of the senior members of the model rocket community.

EXPLODED VIEW



1	Balsa Nose Cone	BC-710
1	Body Tube	ST-730
1	Body Tube	ST-525E
3	Wood Dowels	WD-1080
1	Engine Hook	EH-18
1	Laser-cut Fin Set	FV-72
1	Centering Ring Set	CR-57EH
2	Launch Lugs	LL-2AM
1	Streamer	RS-110
1	Decal	DKV-72

TOOLS

In addition to the parts supplied, you will need the following tools to assemble and finish this kit. Wax paper is also needed.



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ASSEMBLY

□ 1. These instructions are presented in a logical order to help you put your Red-Eye[™] together quickly and efficiently. Check off each step as you complete it and we hope you enjoy putting this kit together.

ENGINE MOUNT

□ 2. Insert one end of the engine hook (EH-18) in the slit in the pre-punched engine tube (ST-525E).



3. Carefully detach the centering rings (**CR**-**57EH**) and slide the ring with the notch over the engine tube. Align the notch over the engine hook and slide it about 1" from the bottom of the engine tube as shown.



□ 4. Slide the remaining ring over the top of the engine tube and even with the end of the tube. Apply a bead of glue around both rings at the intersection with the engine tube. Apply a film of glue inside the top of the engine tube. Allow to dry.



□ 5. Glue one end of the streamer (**RS-110**) to the engine tube, centered between the two rings. Some glues will not stick to the plastic material. In this case, you can use masking tape to attach the streamer.



6. After the assembly is dry, wrap the streamer around the engine tube and set the assembly aside.



MARK TUBE

□ 7. Stand the main body tube assembly on the circle of the fin guide below and make the fin position marks and the launch lug position "LL" on the sides of the tube. Find a convenient channel or groove such as a partially open drawer, a door jamb (as shown,) or a piece of molding. Using the channel, extend all four marks the length of the tube. Place an "LL" on the launch lug line.



□ 8. Carefully remove three of the fiber fins from the fin sheet (FV-72). Place one of the fins on a flat surface covered with wax paper. Apply glue to the notched section and attach one of the wood dowels (WD-1080) inside the notched section. Make two more assemblies with the fins and remaining dowels. Allow to dry.



□ 9. Apply glue to the root edge of one of the fin assemblies and position it along one of the lines drawn for the fins on the side of the body tube and even with the bottom of the body tube. Remove the fin, set it aside and allow it to almost dry, apply additional glue, and reposition. Repeat for the other two fins. If you follow these instructions, the fins will not require much additional work to keep them aligned. Allow the fins to completely dry, checking carefully to make sure they are parallel with the main body tube.



□ **10.** Glue the launch lugs (**LL-2AM**) onto the body tube on the LL line, one even with the bottom of the body tube and one even with the top of the tube.



□ 11. Insert the nose cone (BC-710) in the body tube and check for proper fit. Apply a bead of glue inside the top of the body tube and insert the nose cone until the shoulder is flush with the body tube.



FINISHING

□ **12.** When the fillets have dried, prepare balsa surfaces for a smooth professional looking finish. Fill the wood grain with balsa fillercoat or sanding sealer, When dry, sand with fine sandpaper. Repeat until smooth.

יוין יווות ברך ברי	1st coat of fillercoat	
ייזייהת ורחויילי	2nd coat of fillercoat	
ייריות ורחילי	After 1st sanding	
יוינית דר תוכני	3rd coat of fillercoat	
ウィルバー・パーク	After 1st sanding	

□ 13. After all balsa surfaces have been prepared, wipe off all balsa dust with a dry cloth. First spray the model with an enamel primer. Choose a high visibility color like red for the final color. Spray painting your model with a fastdrying enamel will produce the best results. PA-TIENCE...is the most important ingredient. Use several thin coats, allowing each coat to completely dry before the next coat. Start each spray a few inches above the model and end a few inches below the model. Keep the can about 12" away and use quick light coats. The final coat can be a little heavier to give the model a glossy wetlooking finish.

□ 14. After the paint has dried, decals should be applied. The decals supplied with the Red-Eye[™] are pressure sensitive decals. Each decal should be cut separately from the sheet. Think about where you want to apply each decal and check for fit before applying the decal. Use the cover photo for suggested placement. The foil decals should only be applied over painted surfaces. A spray overcoat will dull the reflective finish.

FLIGHT PREPPING

□ 15. Insert a small "T" type engine (miniengine) in the engine mount. Make sure the engine hook captures the engine. Wrap the steamer around the top section of the engine mount between the rings. Insert the assembly into the main body tube. If it is loose, wedge a piece of paper between the rings and the inside of the body tube.



□ 16. Refer to the model rocket engine manufacturer's instructions to complete the engine prepping. Different engines have different igniters and methods of hooking them up to the launch controllers.

□ 17. Carefully check all parts of your rocket before each flight as a part of your pre-flight checklist. Launch the Red-Eye[™] from a 1/8" diameter by 36" long launch rod. It may be necessary to wrap a small piece of masking tape around the launch lug about 8" from the blast deflector to support the Red-Eye[™]. Since the Red -Eye[™] will recover in two pieces, make sure you have an observer to help you recover both pieces.

□ **18.** After each flight, clean any residue from the inside of the tube and make sure the vent hole is clear.