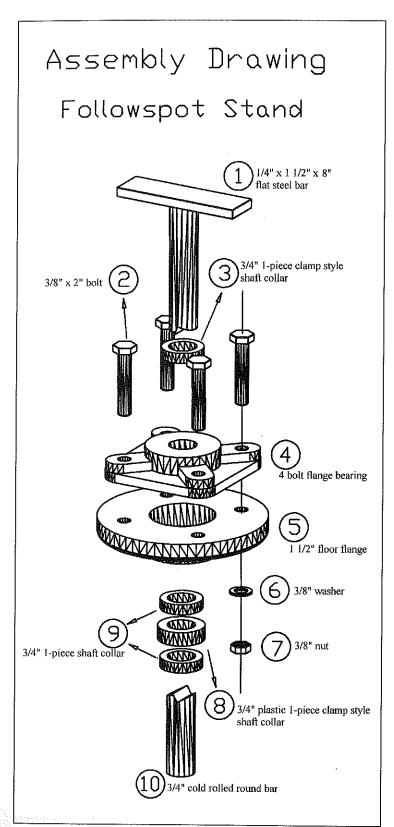
AN ERS FOLLOW SPOT STAND

by Tim Francis and Joshua Redfern Trinity College

exhibit no. 18



Like many lighting designers, when I need to use a follow spot in a small theater, I simply hang an iris ERS unit "yoke up" off a catwalk rail and give the operator some gloves and a wrench. This has worked adequately on a number of occasions but requires that the operator constantly fiddle with the c-clamp yoke bolt to avoid over-loosening. Seeking a better solution to this problem for a recent production, I assigned my assistant lighting designer the task of creating an ERS follow spot stand. After several attempts, we arrived at the following solution.

ASSEMBLY

First, make the yoke platform by welding a piece of \(\mathbb{4}'' \times 1\\\ \mathbb{2}'' \times 8'' \text{ flat steel bar (1) to a 3'-0" length of 3\(\mathbb{4}'' \) cold-rolled round bar (10). Slip a 34" one-piece, clamp-style shaft collar (3) onto the cold-rolled bar and tighten about 2" from the flat steel bar. Slip a four-bolt, rigid flange mount bearing (4) onto the cold-rolled bar and seat against the shaft collar (3). Bolt the bearing (4) to a 1½" floor flange (5) using four \%" x 2" bolts with washers and nuts (2, 6, 7). Capture a ¾" plastic, one-piece, clamp-style shaft collar with locking bolt removed (8) with two onepiece, standard-style ¾" shaft collars (9) about four inches from the end of the cold-rolled bar. Thread one end of a 3'-0" length of 11/2" schedule 40 pipe (threaded both ends) into a 50-pound boom base. Insert the bearing assembly into the other end of the pipe and secure by threading the floor flange onto the pipe.

NOTES ON ASSEMBLY

The top shaft collar (3) helps to carry the weight of the ERS so the two set-screws in the flange bearing will not bear the all the load. The plastic shaft collar (8) fits snugly inside the 1½" pipe to keep the coldrolled bar from rattling. The locking screw must be removed for it to fit. Alternatively, the locking screw could be filed down and the shaft collars (9) omitted. The ERS can be clamped to the flat bar with two C-clamps or drilled through and bolted. Finally, by drilling and tapping a hole through the side of the 1½" pipe one can lock the cold-rolled shaft down (a little) with a bolt.

SUMMARY

The ERS Follow spot Stand improves the safety and operation an ERS follow spot. It can be made for under \$50 (excluding the boom base) with parts primarily from Grainger or similar supplier. Because the height is adjustable by raising the cold-rolled round bar and locking it higher, it is easy to set up to suit different operators. It has become a useful addition to our lighting inventory. \blacktriangledown

PARTS LIST		
50 pound boom base	· · · · · · · · · · · · · · · · · · ·	stock item
1/4" x 11/2" x 8" flat steel bar		scrap
14" x 36" cold-rolled bar	112	3.00
	Grainger No.	
36" of 11/2" schedule 40 pipe	5P782	14.23
1½" floor flange	5P603	4.93
Rigid flange bearing	1F548	15.09
Plastic shaft collar, one-piece, clamp-style	1F460	3.82
Shaft collar, one-piece, clamp-style	1L662	2.71
Shaft collars	2X570	2.74