**Laser System Projector Safety/Setup Checklist**

**Initial Startup**

0 Turn on control computer, start laser software, power up laser control electronics. Turn on main power to lasers (if applicable).

0 Remove any spectators from the area; caution all qualified technicians near the projector. Check that all shrouds and masking are in place.

0 Verify laser projector is secure.

0 Check key switch for proper operation by trying to start lasers with key in OFF position. Turn key to ON position.

0 Push “Laser On” button on each of the laser controller displays. Record time on:

0 Observe that emission indicator lights (on the laser head) come on.

0 Confirm “E-STOP” button operation.

0 Verify proper interlock/laser shutter operation.

**Laser Alignment**

0 Keep spectators and all unessential personnel away from both the projector and termination area.

0 Verify visual control of the entire projection space from the operation location.

0 Verify physical masking is in place to prevent any laser emissions from reaching public areas.

0 Alert personnel that the laser alignment is about to take place. Check each scanner set for proper operation and adjust offset as needed for alignment. Make sure that all surfaces on to which beams terminate are free from specular reflection.

0 Ensure that front of projector is properly masked. Mask off any unnecessary openings.

**Final Setup Check**

0 All beams must be a minimum 8’3” lateral distance and 9’10” vertical distance from the floor to the lowest beam over the audience. Ensure that markings and barrier is in place to prevent access to the projector.

0 Check and verify communication with all laser spotter personnel.

0 Check setup grids on the projection surface and adjust offset for differences. Eliminate sources of any stray light at high power.

0 Record the operating beam power at each projector and record these measurements here:

**Laser #1:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Laser #2:\_\_\_\_\_\_\_\_\_\_\_\_\_\_Laser #3:\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**During the Performance**

0 Be constantly alert for audience unruliness during the performance. If any beam misalignment or stray light develops, and/or laser spotter personnel make a call – turn that beam position off.

0 If any equipment malfunction develops that affects safe performance, the operator must immediately terminate the performance until the problems are corrected and safety conditions fully restored.

**Post Performance**

0 Turn off the laser power supply and remove keys to the lock box. Turn off laser projectors first, control electronics,

then computers. **Time Off:**

0 Note any equipment malfunction that may have developed during the show. All reasonable efforts should be made to repair any such malfunction by next show.

**Operator Signature: Show Date/Time:**

**Name of Show and Location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**