Welcome To

THE USER'S GUIDE TO NATHAN SEIFER AUDITORIUM

This document was written by James Feinberg in 1997 as his Senior Honors Thesis. It began as a proposal to buy some new lighting and sound equipment for Nathan Seifer, but it quickly became apparent that something more than just equipment was needed. There needed to be instructions for the people who would use the equipment so that neither they nor the equipment would get hurt. From came the idea for a "User's Guide," which evolved into what you see here.

The guide is divided into sections, one each for Lighting Designers, Sound Designers, Stage Managers, and Technical Directors. There is also a section for things that apply to more than one group, including opening up Nathan Seifer. At the end there is a list of where to buy the supplies you need, and a section describing the equipment changes that were made and improvements that can be done in the future. Finally, there are copies of the manuals for the sound board, the MiniDisc player, and the amplifier.

I hope that you will find this useful and that it saves you some time and aggravation in working in the less-than-ideal conditions that are Nathan Seifer.

Table of Contents

Lighting Design in Nathan Seifer	1
Implementing your Lighting Design in Nathan Seifer	2
Paperwork	3
The Hang	
Troubleshooting	5
Focusing	6
Writing Cues	
Lighting Instrument Beam Spreads and Coefficients	
Beam Angle Vs. Field Angle	
Sample Lighting Cue Sheet	9
Technical Information for Lighting Designers	10
Using the Light Board	
Assigning Channels to Submasters	
Creating a Chase	
Types of Lighting Instruments, And Their Uses	12
How The Different Lights Work	12
Gels	
Nathan Seifer's Power System	
Basic Electrical Concepts	23
Sound Design in Nathan Seifer	
Building A Show Disc	25
Writing Cues at Tech	25
Sample Sound Cue Sheet	27
Technical Information for Sound Designers	28
The Sound System	28
Using the Mackie Mixer	
Using the MiniDisc Player	28
Using Microphones	29
Troubleshooting	30
Adding More Equipment	31
Live Effects	31
Stage Management	33
Assistant Stage Managers	33
Before Rehearsals Begin	33
During Rehearsals	34
Technical Rehearsals	
Performances	38
Technical Direction and Scenic Construction in Nathan Seifer	
Working Drawings	
Construction	
Scheduling	
General Information	
Opening and Preparing Nathan Seifer	44
Closing Nathan Seifer	
Headsets	45
Stage Direction Terminology	46
Changes and Purchases Made	47
Suggestions for the Future	47
Appendix A: Vendors and Rental Houses	
Recommended Inventory For Each Year	

TECHNICAL DIRECTION AND SCENIC CONSTRUCTION IN NATHAN SEIFER

Serving as the Technical Director for a production in Nathan Seifer is a unique challenge. Your tools are limited, your construction space is almost non-existent, and good help is hard to find. But with a little creativity and common sense, you can build a safe and sturdy set and have a good time doing it. In most professional theaters, the Technical Director is only in charge of scenic construction (and is often also the Master Carpenter), while the Master Electrician is in charge of implementing the lighting design and the Costumiere (or Costume Mistress) is in charge of implementing the costume design. In Nathan Seifer, the Technical Director can end up in charge of any or all of these departments. This guide will address some of the issues that will come up in constructing a set in Nathan Seifer, but will not attempt to discuss elements of scenic design.

WORKING DRAWINGS

The first thing you will need to do after the set has been designed is to figure out how to build it. One way to do this is to create a set of working drawings. These drawings will show each element of scenery to be constructed, in accurate scale, showing how all pieces of lumber will fit together. From these drawings, you can develop a fairly accurate idea of how much lumber and hardware you will need to purchase to build the set, and make your producer happy by pricing out your lumber order.

If you are not the first show in Nathan Seifer for the season, you will need to plan your constructed pieces in such a way that they will be easy to load in quickly when the time comes. Each piece should be small enough to fit through the stage doors and light enough to be easy to carry. You should decide far in advance exactly how each unit will connect with the others around it, and build your pieces with edges that will easily join together.

CONSTRUCTION

Once you have planned your construction, you are ready to get your supplies and start building. You will probably not be able to fit all the lumber you need into a car, so you may need to arrange for delivery. Both Home Depot and Mass Hardware can do this for you. Keep in mind that it may be several days after you place your order before the delivery can be made, so plan ahead. Be sure that Nathan Seifer (or at least room 28) is available at the time you have scheduled your lumber order.

You can build your set in pieces in room 28 in Ford Hall (downstairs across from the snack machine), or in the hallways in Ford after business hours. You should always have at least one person working with you during construction to help hold your materials and double check your work. When using the power saws, be sure that you have adjusted the blade depth so that you will cut through the wood and not the surface beneath, and always wear eye and ear protection.

At the end of each day of construction, you should allow time to clean up your work and your working space. The other users of Ford Hall will not be happy to come in the next morning and find lumber and sawdust scattered through the hallways. You will also find it easier to start work again if things have been put away properly. By putting away your lumber, you can find which scraps can be used and which are garbage, and ensure that no good lumber gets mistaken for trash. By putting away your tools, you can make sure that nothing disappears or simply gets lost in a pile of wood somewhere. When you go looking for a screw driver you will be happy to find it in the toolbox instead of in a corner under a platform.

For more information about building specific items, like platforms or flats, check out Gillette's *Theatrical Design and Production* in the Brandeis library. Another excellent reference is the *Backstage Handbook*, by Paul Carter, now in its third edition. (These and other books are listed in Appendix B: Suggested Reading.)

SCHEDULING

One of the most important things you will do as a Technical Director is to plan out your schedule. Once you have seen the scenic design and made your working drawings, you should have a pretty good idea of how long it will take you to build the set. Generally in Nathan Seifer, one show will close on a Sunday and the next show will open later that week. Your goal is to get the first set out and the second set in as soon as possible. As much of the set as possible should be built before load-in, so all that remains to be done is to bring the pieces into the space and attach them.

You will be competing for time in room 28 (which serves as your wood shop) with the other shows in production that semester. You will also need to find times when you can work without disturbing the other people who work in Ford Hall (including Public Safety). You should talk to the other technical directors and work out a schedule for sharing the space that gives everyone enough time to build their own sets before their shows open.

Before your load-in (which will usually end up combining with strike from the previous show) you should have a concrete, specific plan for installing the set. Determine which piece is the most important or central to the set, and install that first. Then work out from that, adding one piece at a time. For your strike, you can generally just reverse this plan. Don't forget to allow time for the outgoing show to paint the walls and floor black if needed. Take advantage of all of the people who are there to help you with strike. Put them to work carting away pieces of the old set, painting things black (or whatever color the new show needs) and bringing in pieces of the new set.

APPENDIX B: SUGGESTED READING

- Backstage Handbook (Third Edition) by Paul Carter. © 1994. Broadway Press: Shelter Island, NY. 800-869-6372
- Theatrical Design and Production (Second Edition) by J. Michael Gillette. ©1992. Mayfield Publishing Company: Mountain View, California.
- Stage Lighting Revealed: A Design and Execution Handbook. by Glen Cunningham. ©1993. Betterway Books: Cincinnati, Ohio. 800-289-0963
- Sound and Music for the Theatre: The Art and Technique of Design by Deena Kaye and James LeBrecht. ©1992. Back Stage Books: New York, NY.
- Sound Design in the Theatre by John L. Bracewell. ©1993. Prentice-Hall: Englewood Cliffs, NJ.
- Sound for the Stage: A Technical Handbook by Patrick M. Finelli. ©1989. Drama Book Publishers: NY, NY.
- The Stage Management Handbook by Daniel A. Ionazzi. ©1992. Betterway Publications: White Hall, VA. 804-823-5561
- Stagecraft: A Handbook for Organization, Construction, and Management by David Welker. ©1987. Allyn and Bacon, Inc. Newton, MA.