

TEST BASICS

Local 48 Education



Local 48 Education Committee

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John Bryg
President
IATSE Local 48



IRENE MACK SHAFFER

BUSINESS AGENT

CALL STEWARD

WARDROBE



- Gondola (wardrobe rack)



Another view of a Gondola

travelling unit on wheels that permanently houses costumes.

has bar for hanging clothes

might have rope light in in



Gondola

Wardrobe

Workbox (any department)

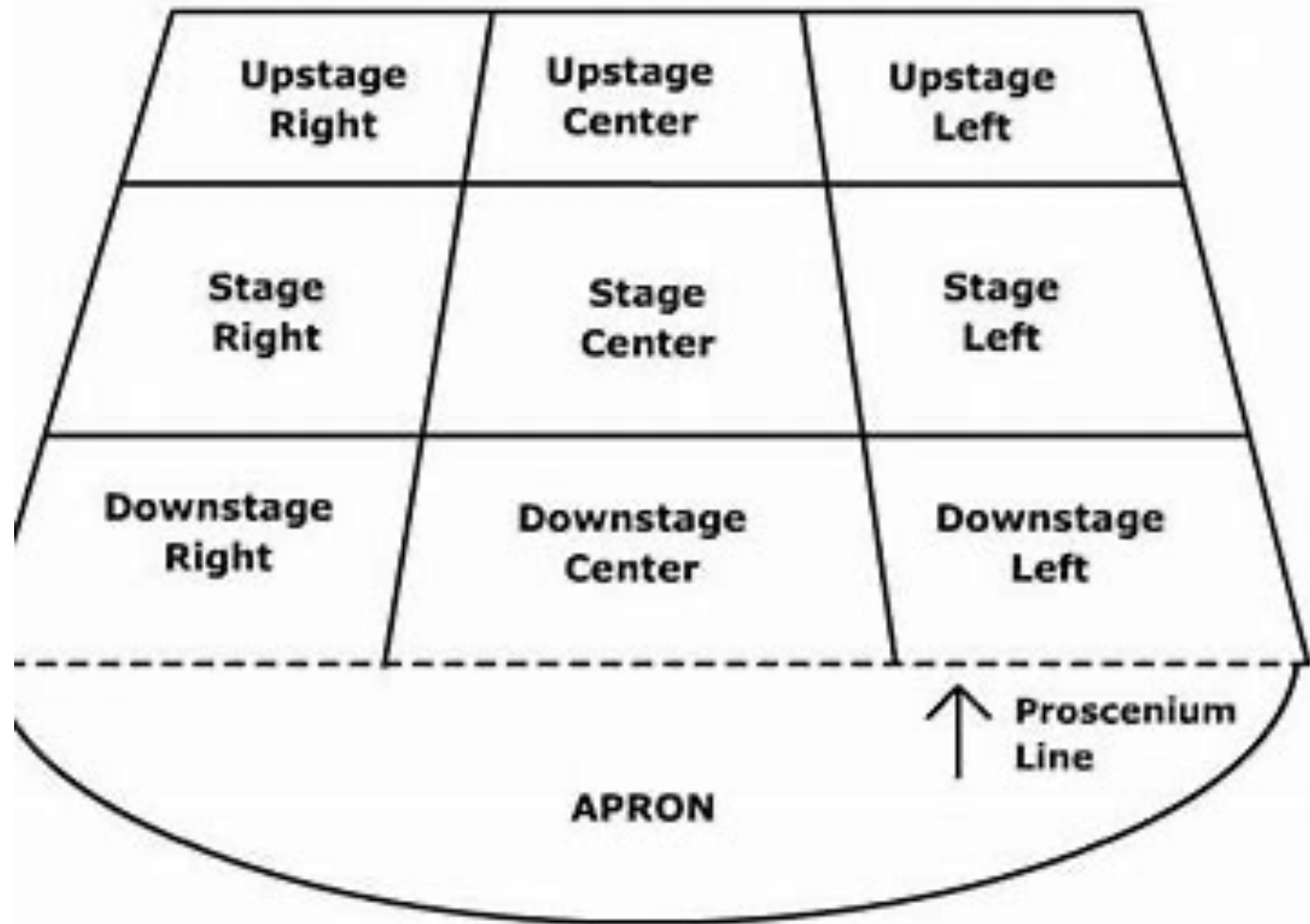




LISA BROSOVICH

- JOB STEWARD
- BASIC THEATRE
DIRECTIONS AND TYPES
- SOUND

Stage directions
{from
onstage
view}



Vocabulary

Other Stage Vocabulary

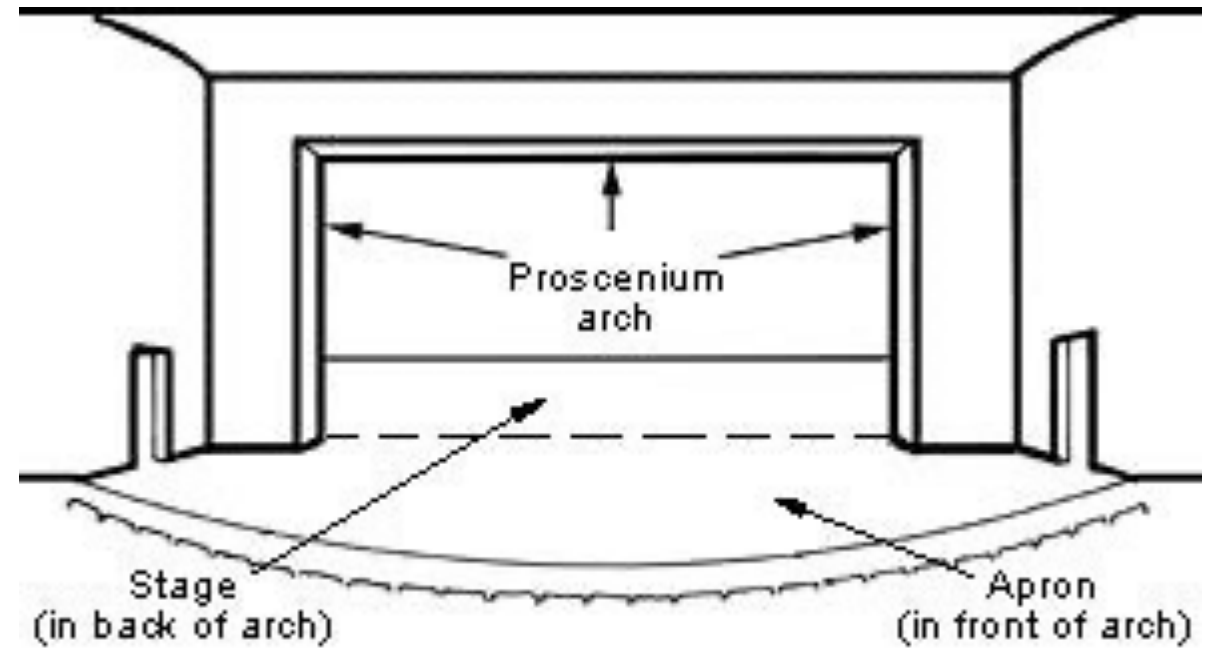
- Onstage – the acting area within the set, visible to the audience
- Offstage – the parts of the stage not enclosed by the setting
- Backstage – the area behind the setting
- Wings – the offstage areas to the left and right of the acting area
- House – the auditorium where the audience sits (also called 'outfront')

Ground Cloth: A painted drop which is laid out on the stage floor and key scenery is placed

Plaster line is upstage of the proscenium. This is where all marking starts 0'0"

Center line is imaginary line running down the center of the stage.

-
- Apron: part of the stage in front of the proscenium Arch

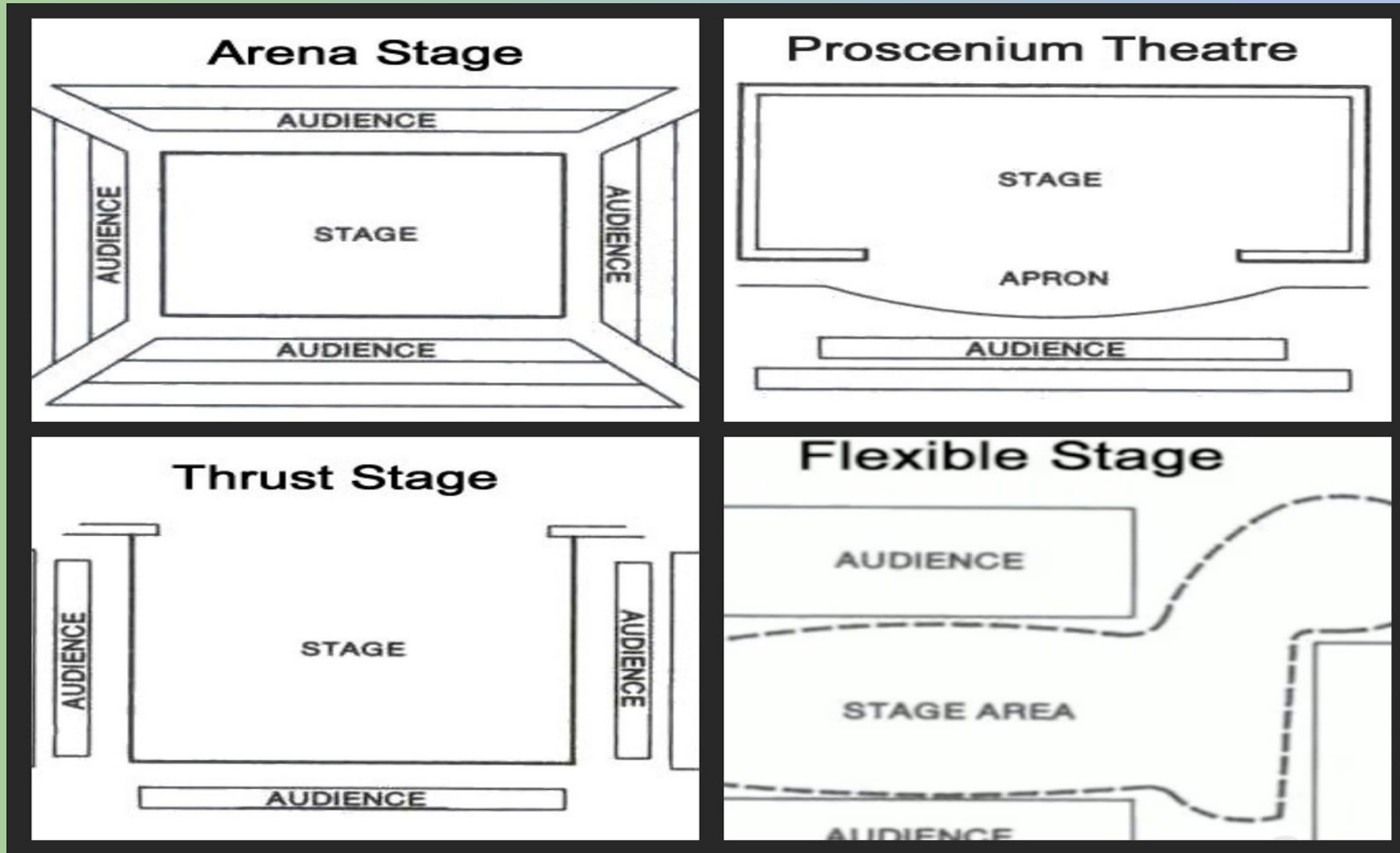


Proscenium Theatre

- **Fire Curtain** is designed to lower automatically in the event of a fire. It creates a fire and smoke barrier separating the stage from the auditorium, allowing time for the audience to exit. Immediately behind the proscenium arch. The furthest drop downstage,
- **GRID** is a floor high above the stage and often made of metal on which hardware is mounted to facilitate the raising and lowering of scenery and other objects. Metal framework at the top of the stage house.

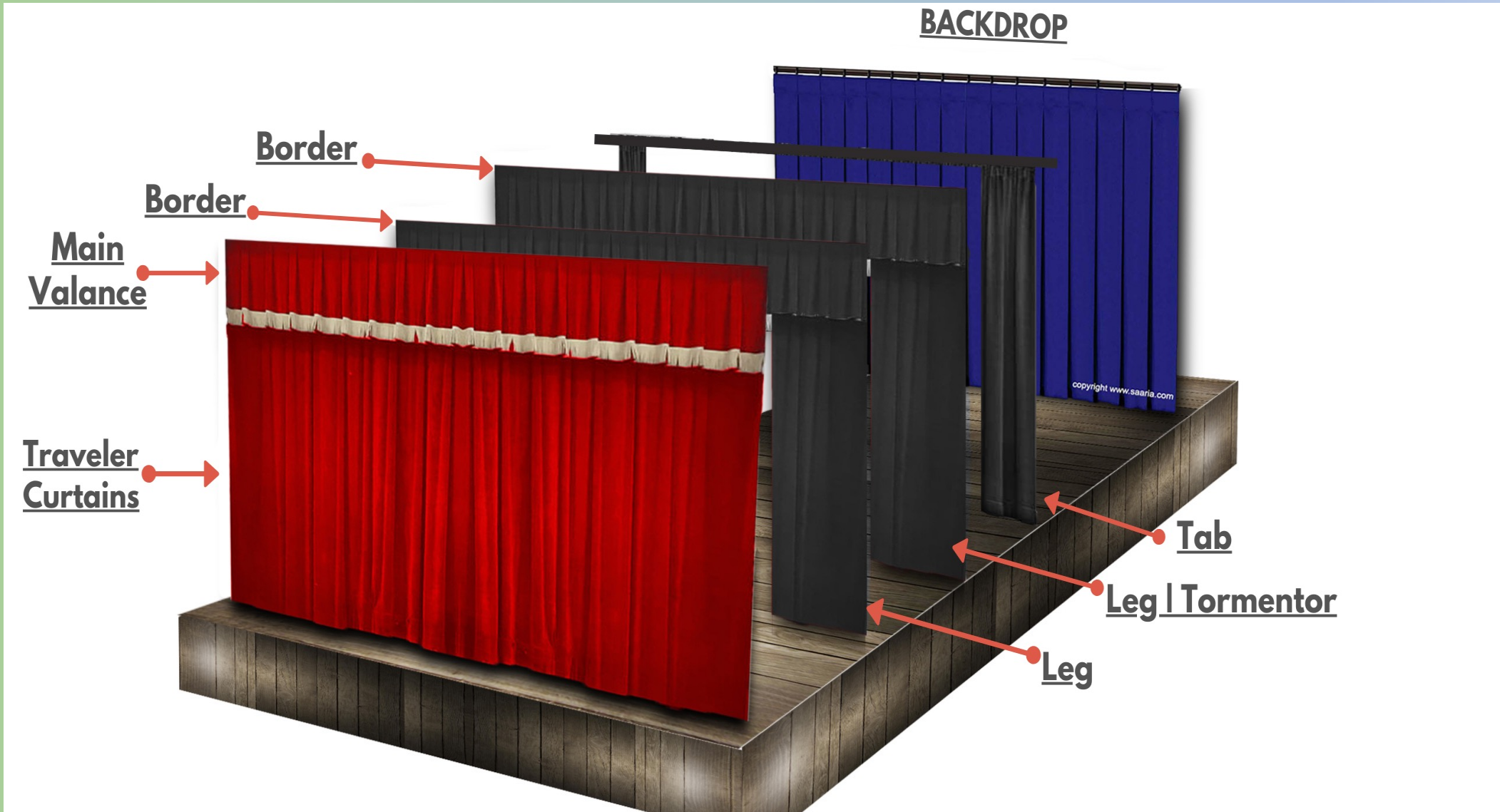


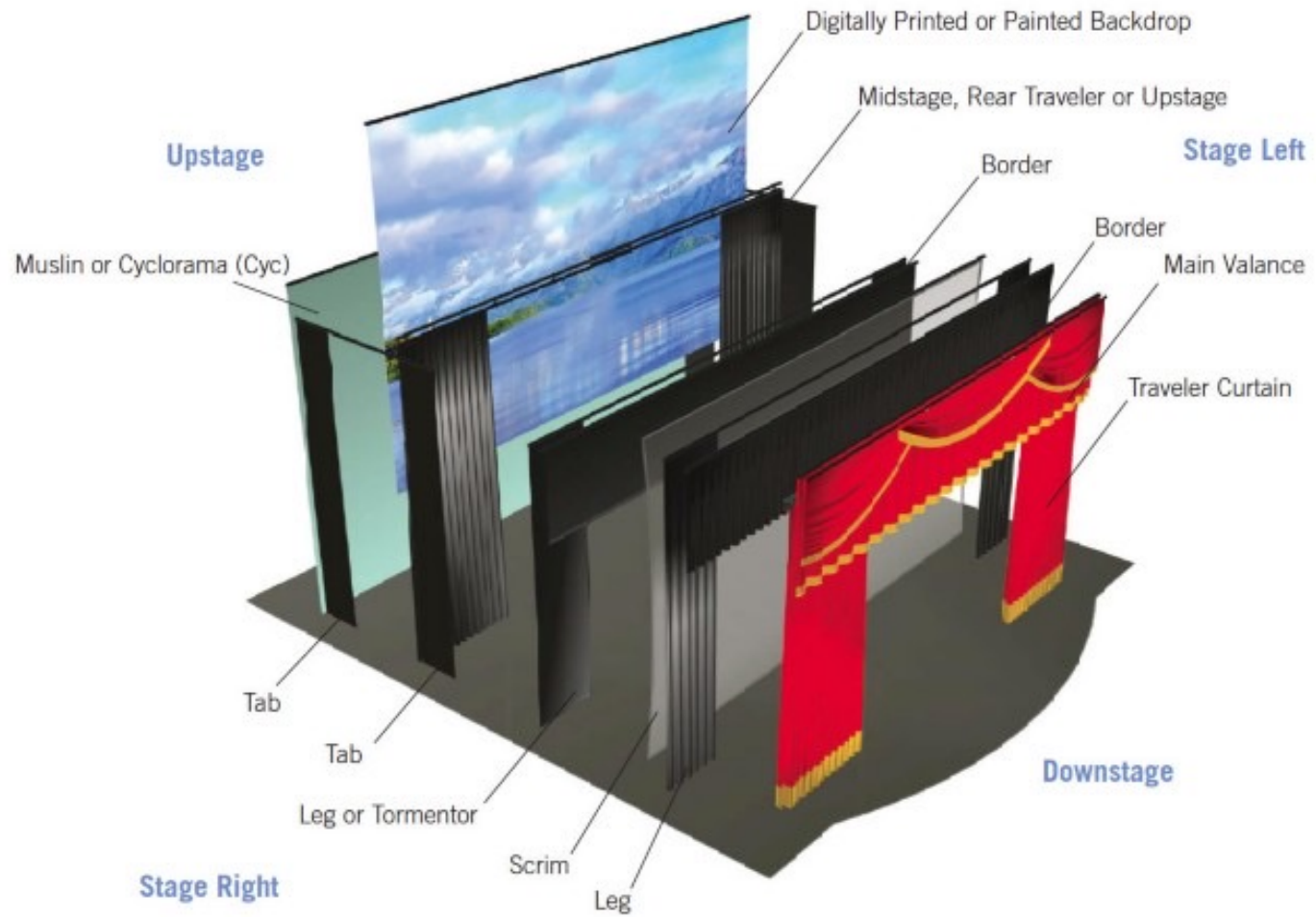
Types of Stages





- Soft Goods
- Fly Systems





Rail Call Sheets

- Only one person should be communicating to the Department Head Fly person. Generally, it is the Department Head Carpenter

Rail Calls Information Sheet



Moving a Lineset	
Call from Locking Rail	Response from Loading Gallery
"Is anyone working above?"	- (if so) - "Yes"
"Are you clear of lineset (#)?"	- (if clear) - "Yes" - (if not clear) - "No" and rail operator waits for confirmation of clearance from above.
(After "Clear" is received from the above) - "Lineset (#) is coming in / going out."	- "Thank you"

Weight Loading Procedure	
Call from Locking Rail	Response from Loading Gallery
"On the loading gallery, please add - (Quantity / Size) bricks to lineset (#)."	- "Adding (Quantity/Size) bricks to lineset (#). Is the rail clear?"
(once clear) - "Clear"	- Load weight after confirming correct arbor. - Keep count with your partner as you load. - Insert spreader plate at each sticker. - Once complete, lock thumbscrews of top spreader plate. - "(Quantity/Size) bricks added to lineset (#)."
"Thank you. Are you clear to test?"	- "Clear to test."
Unloading procedure is the reverse of above. Use "remove" instead of "add." ***DO NOT REMOVE SYSTEM PIPE WEIGHT FROM THE ARBOR!***	

Safe Usage Terms	
"Coming In"	- Used when moving a pipe on a lineset in the down direction.
"Going Out"	- Used when moving a pipe on a lineset in the up direction.
"Moving"	- Used when continuing a move after a brief pause.
"Heads!"	- Used in a loud and clear voice to alert everyone onstage when something is dropped from above.
"Runaway!"	- Used in a loud and clear voice to alert everyone in the stage or grid area that a lineset is moving out of control. Move far away from lineset immediately!
Good Practice:	- State location and loose tools / items in use while working in a grid. i.e. "Loose pin and shackle, upstage right!"



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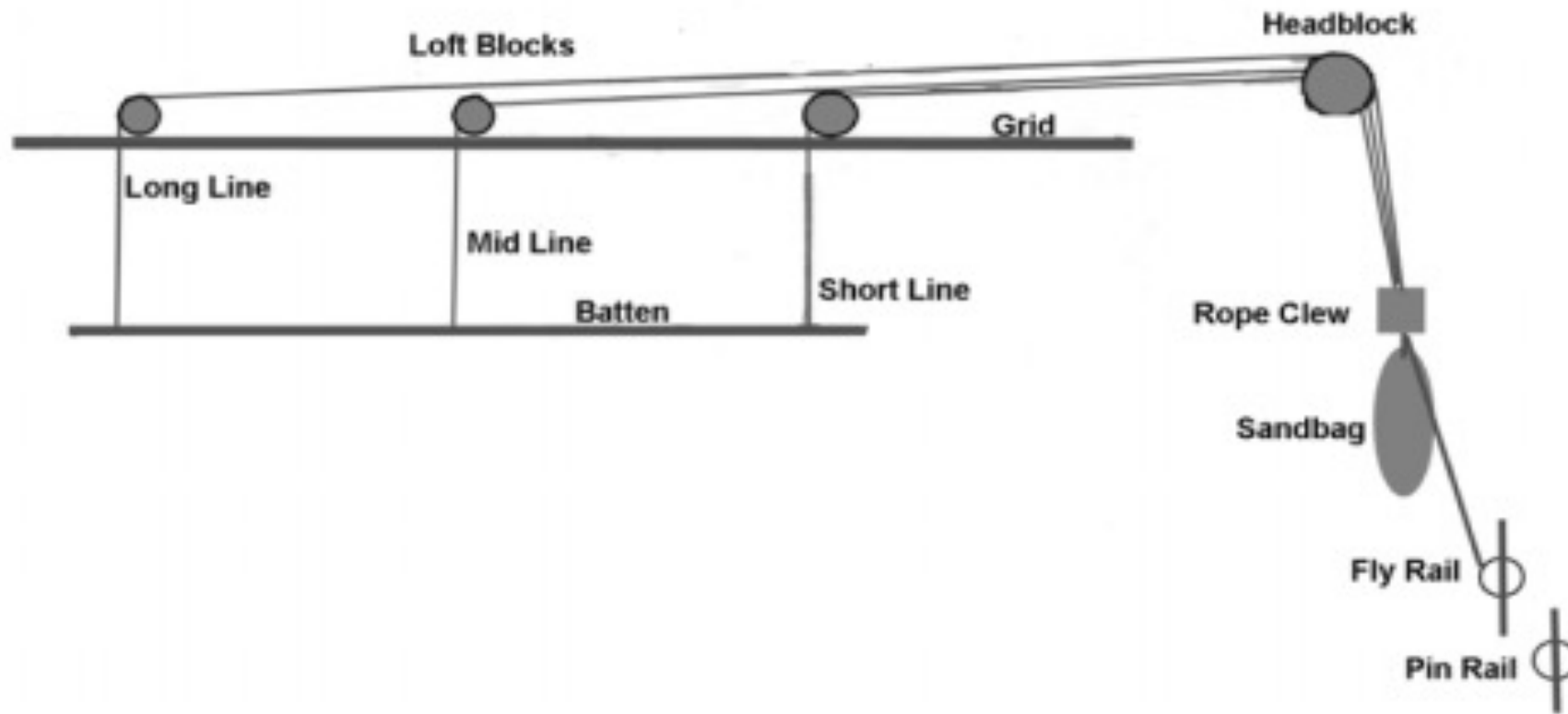
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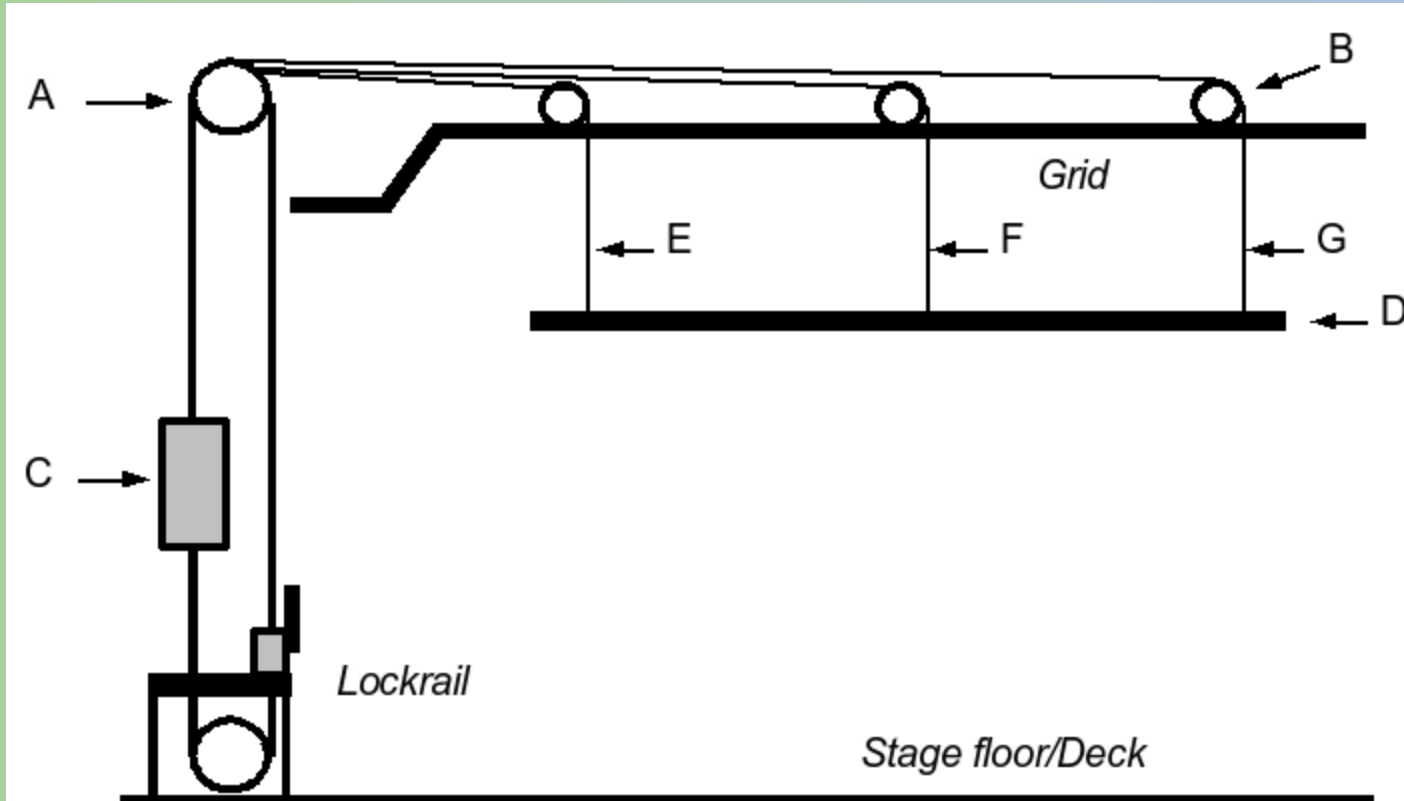
Fly systems

- We have two types that we deal with 1. Hemp system {sandbag} (Goodyear) 2. counterweight {arbor} systems (Civic and EJ Thomas)
- EJ Thomas electrics 1 and 2 are on a winch system. This is run from the Stage Manager console on SL.
- Its primary purpose is to move scenery, stage lighting, or curtains in the backstage area up into the fly loft, or down to the stage level. The ability to lower heavy pieces of equipment to floor level enables users to transfer stage lighting, scenery and curtains without the use of ladders or lifts.
- Only ONE (1) person should talk to the fly rail (generally it's the carpenter)
- **SAVE THE FACE:** Always put the goods on their back so that the good side is facing up.
- When stretching or folding drapes, the good side should be facing up
- You should always be on the upstage of the drop when tying on goods.
- Legs and borders are generally soft goods.
- Taking a wrap on a pin is lashing rope around a belaying pin (think sailing ship)

Sandbag system (Hemp system)



Borrowed from ia470 website



Name the indicated parts of a fly system

A. _____

B. _____

C. _____

D. _____

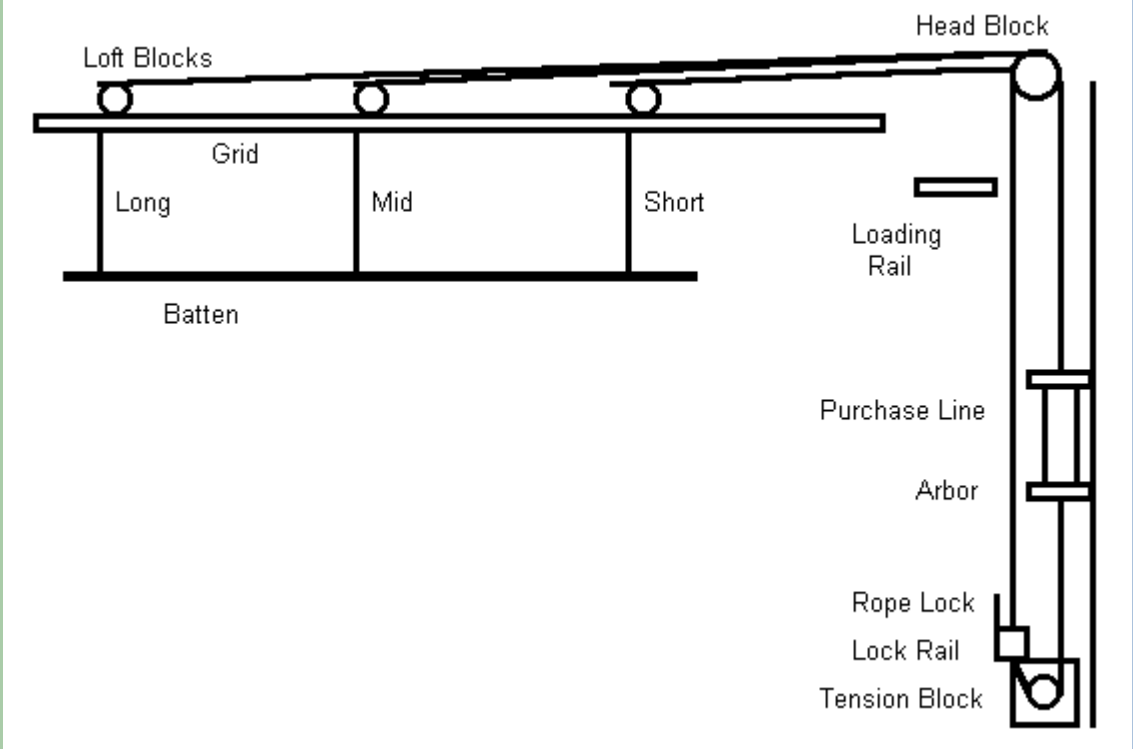
Name the lines:

E. _____

F. _____

G. _____

Arbor Fly System (counterweight)





Sound

Lisa Brosovich

Types

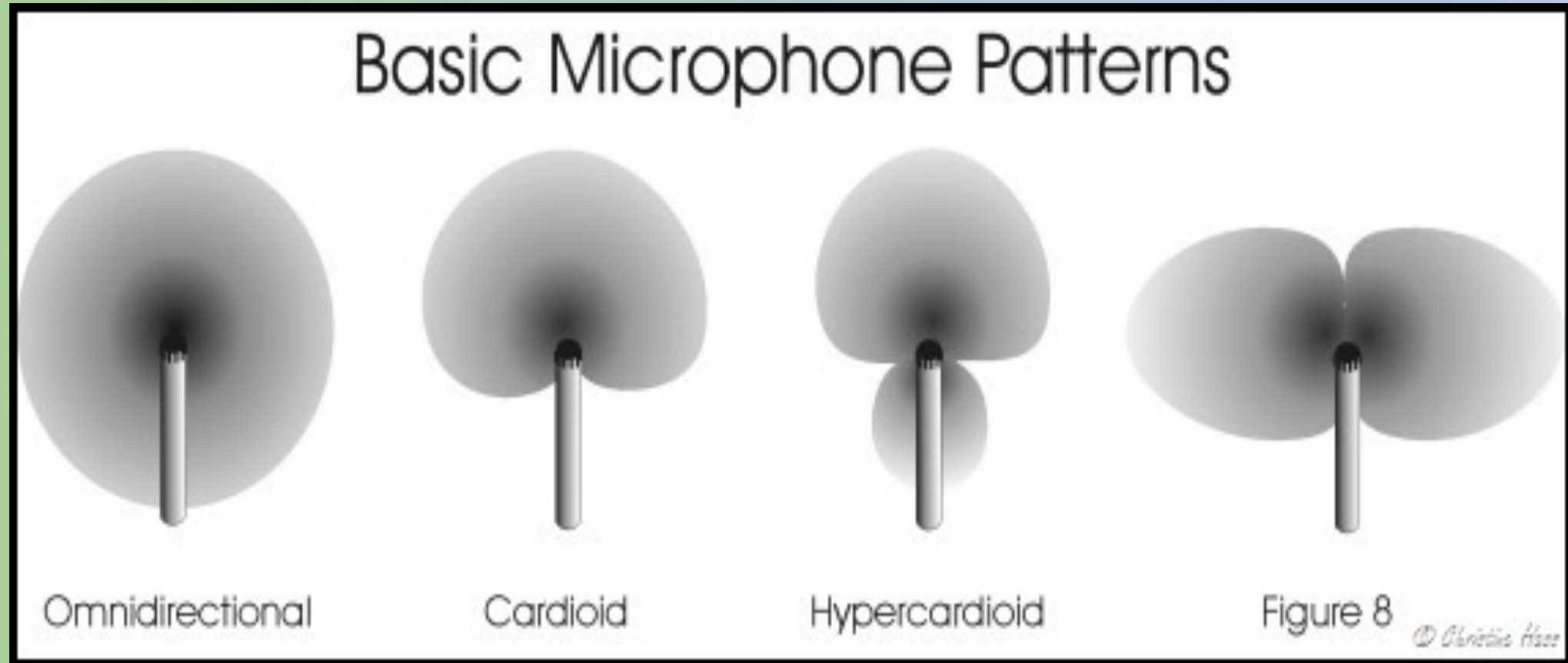
Microphones come in various shapes and sizes.

Handheld, Boom, Lavalier and Wireless.

Each has a basic pattern for picking up the sound.



Microphone patterns



Sound boards and monitor

- MONITORS OR IN-EARS ARE FOR THE PERFORMERS/SPEAKER TO HEAR ON STAGE.



AV/PROJECTIONS & VIDEO

TOM LUKES

This is an ever-changing field.

Some basic stuff

Projection Screens

Fast Fold set-up, Tripod set-up, Front Projection, Rear Projection

Video Walls

LCD, LED, blended projections, projection cubes

Connectors

BNC, Triax, rj45, Fiber optic



OLD AV Terms

- White Balance: When your camera **adjusts the white balance**, it's compensating for the color hue of your light source so the colors in your image stay true to reality. That is, the pure white parts of your image look white and don't pick a warmer or colder tone due to the hue of the light source. Most cameras automatically do this
- Keystoning: is a type of distortion caused when an image projector is not placed perpendicular to the centerline of the screen onto which an image is being projected. [The Keystone effect causes the image to appear as if it is being projected onto a tilted surface, and it appears to lean away from the viewer](#)



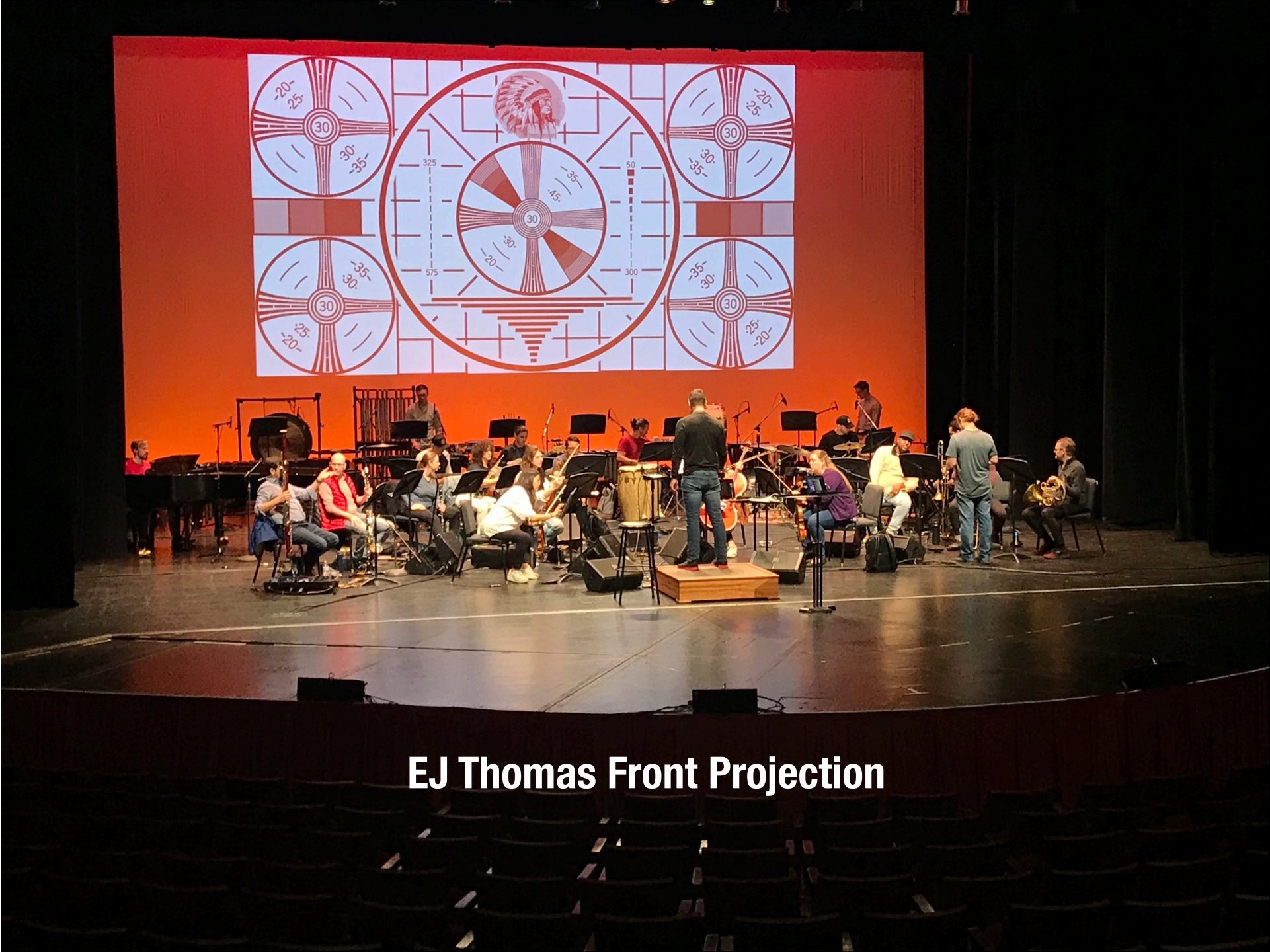
- Front and Rear projection Screens: The main difference between front and rear-projection materials is how the screen treats light. Rear projection setups rely on diffusing the light source to create an image. Alternatively, front projection depends on reflecting sources of light away from the screen. Both projection styles will take up different amounts of valuable space.



Fast Fold



Tripod



EJ Thomas Front Projection

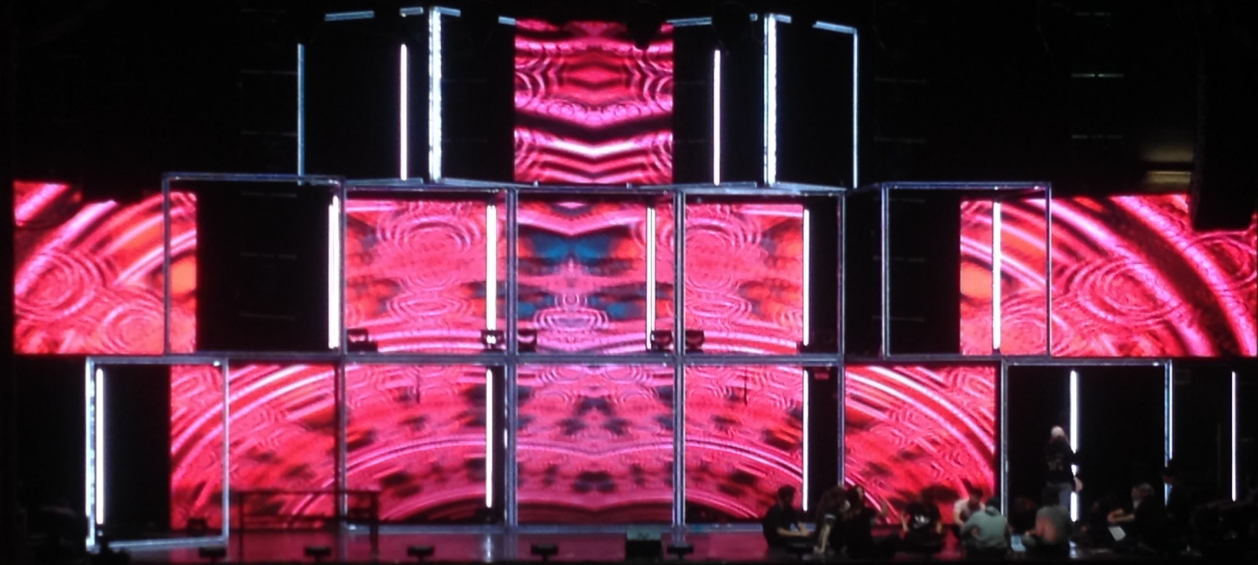
Blossom Orchestra Movie rear projection set-up





Blended Projection

Blossom Orchestra Movie video wall set-up



**Video wall as part of a set at Akron Civic Theatre
Projection Cubes**

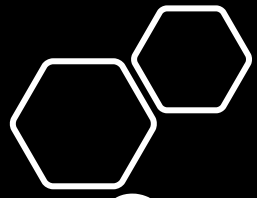


Back of video wall as part of a set at Akron Civic Theatre





Pro Football HOF Canton Civic Center



Type of Connectors

- HDMI

- Most Common in consumer High-Definition video format.
- Loss of signal
 - 15' when using standard cables.
 - 325' when using fiber
- 19 pins
- Passes high-quality audio and video signals
- Can send uncompressed video signals along with either compressed or uncompresses audio signals using a single cable.





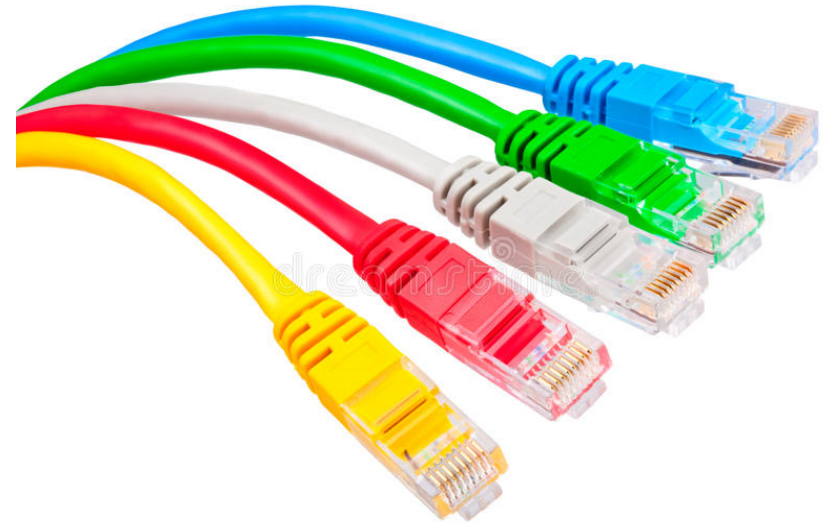
SDI or HD-SDI

- Serial Digital Interface
- Used in professional settings
- Loss of Signal 980'
- BNC connector with one pin





Triax cable female &
male connectors



Cat 6 rj45
connectors



Fiber-optic camera cable male & female connectors





**Pro Football HOF Jerry Jones Party
video control fly pack set-up**



Blossom Orchestra FOH camera

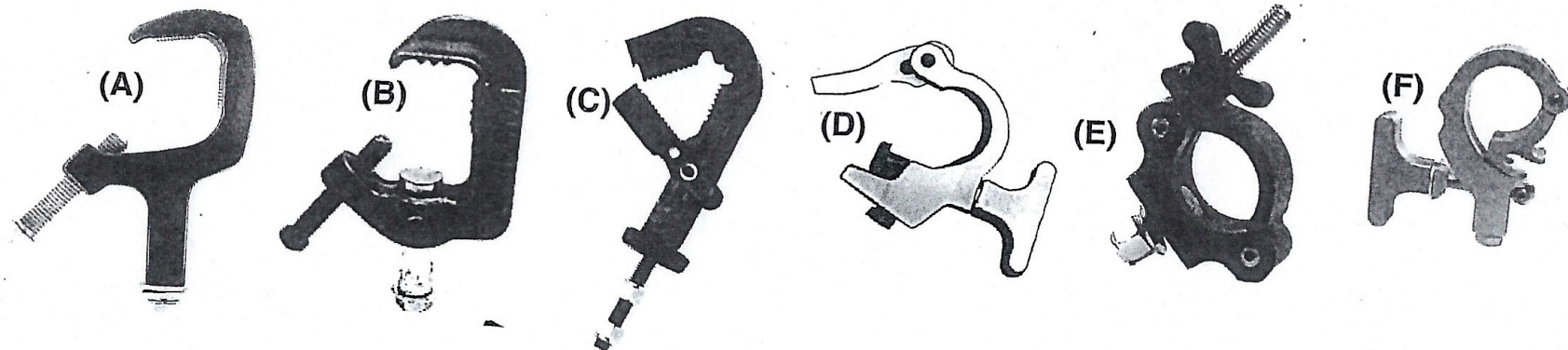


LIGHTING

PATRICIA DONOVAN

JULIE SUMMY

Types of Clamps



Types of c-clamps

DON'T over tighten!

ETC Source four body

- Shutters to make cuts to the light
- Make sure that the gel frame is facing up. The metal clip on the lens train.
- Has a gobo (template) slot. Need a holder
- A Gobo is a pattern that fits into the holder and creates that image in light.
- When focusing you will be asked to flag a light. Just wave your hand in front of the instrument.
- This unit and all units should have a safety, which is a wire cable that clips around the light and the batten.
- Also called a leko or ers (ellipsoidal reflector spotlight)
- Don't over tighten the C-clamp

Basic Luminaire

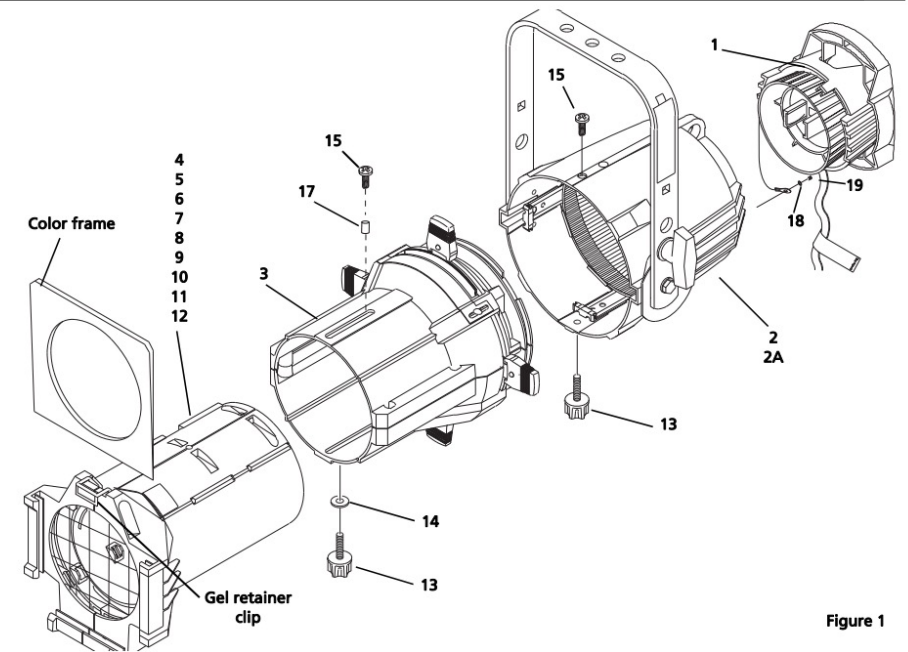


Figure 1



Par can, source 4 (leko or ERS), fresnel

- Lens in a Fresnel is a step lens. Think light house
- Need to add barn doors/top hat to cut the light. In a leko it's the shutters that cut the light.
- Fresnel lights are general much softer than a leko.
- Par fixtures are **low-cost, highly flexible luminaires** designed for diverse applications. Intensity and beam spread are a function of the installed light source, so any one unit can serve multiple purposes simply by changing the lamp type.
- Don't over tighten the c-clamp.



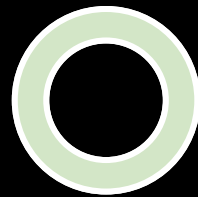
Connectors



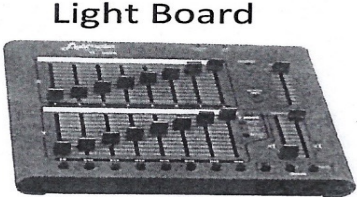


Connectors and cables

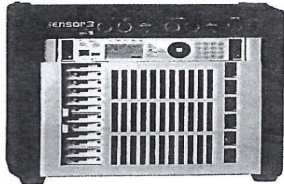
- 3pin cable and plugs
- Edison plug is a 110v plug.
- Two fers (3fers) can be used with any two lights that you want to work together. Just remember watch the wattage.



Basic Lighting Set-up



DMX cable



WIRED to dimmer



Lighting Instrument

AC Cable



Gels and filters are the same

Gobos come in many sizes generally A&B goes into a leko.

Lekos have shutters and can have gobos and top hats place in the unit.

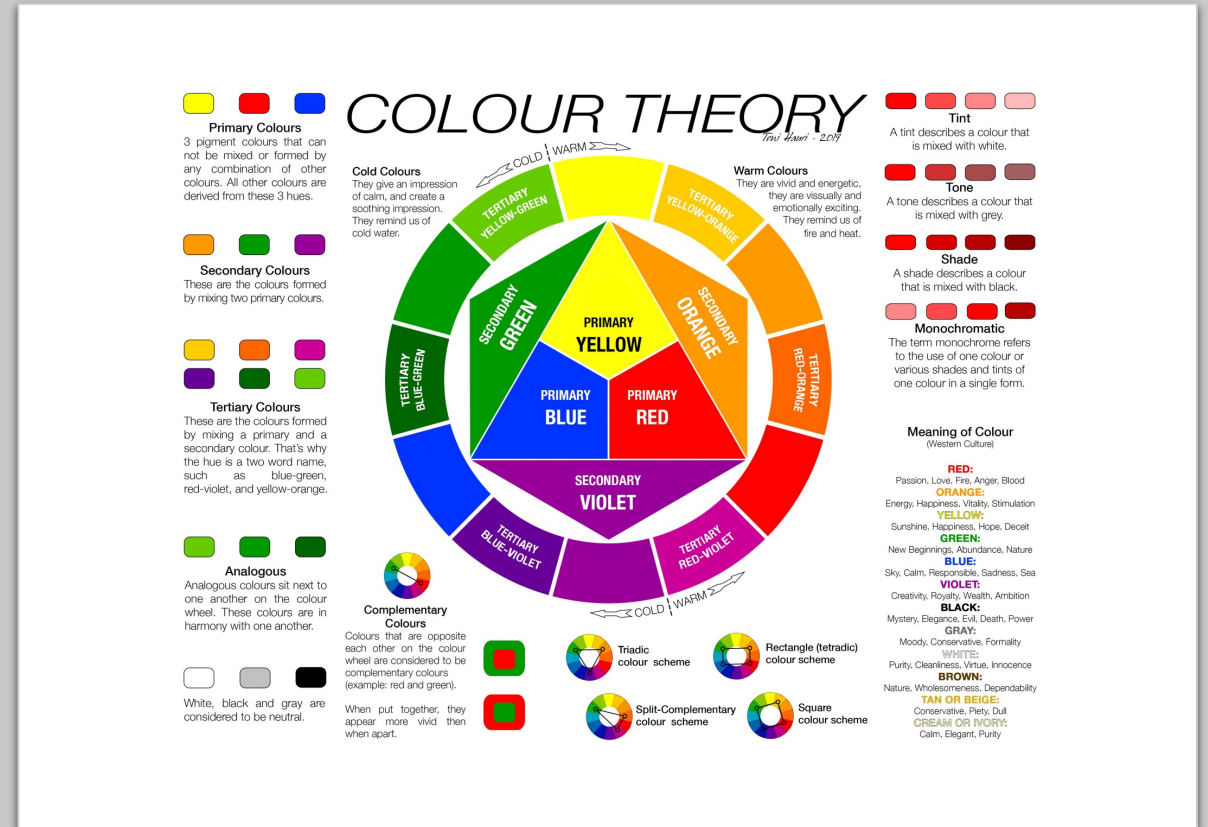
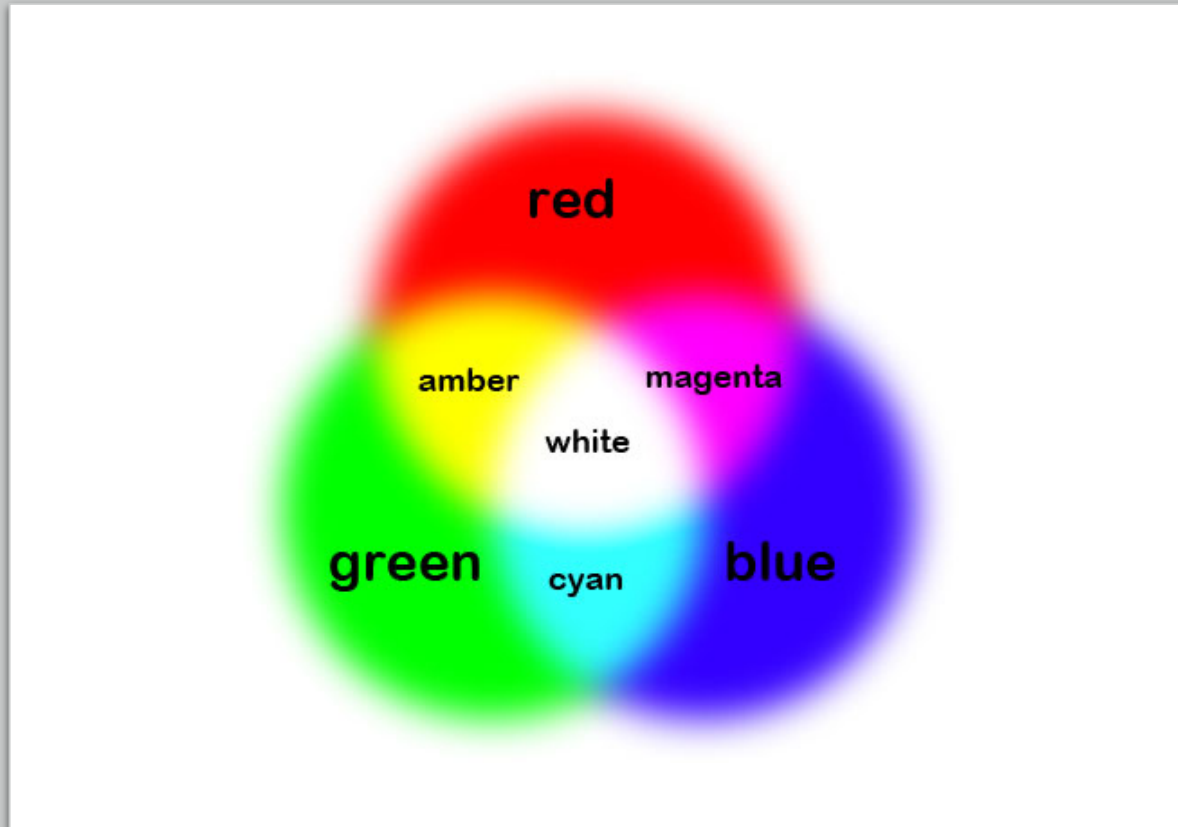
USE a safety cable when hanging a light. It wraps around the batten.

Remember to hang units with the gel frame up.

Do not over tighten the C-clamp when attaching the unit to the pipe.



Lighting color theory vs scenic color



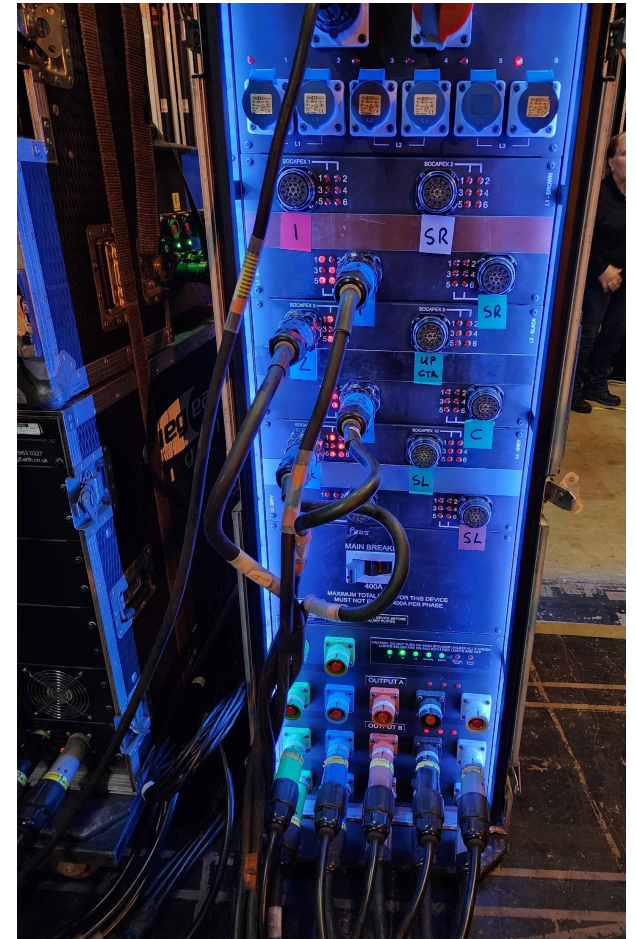
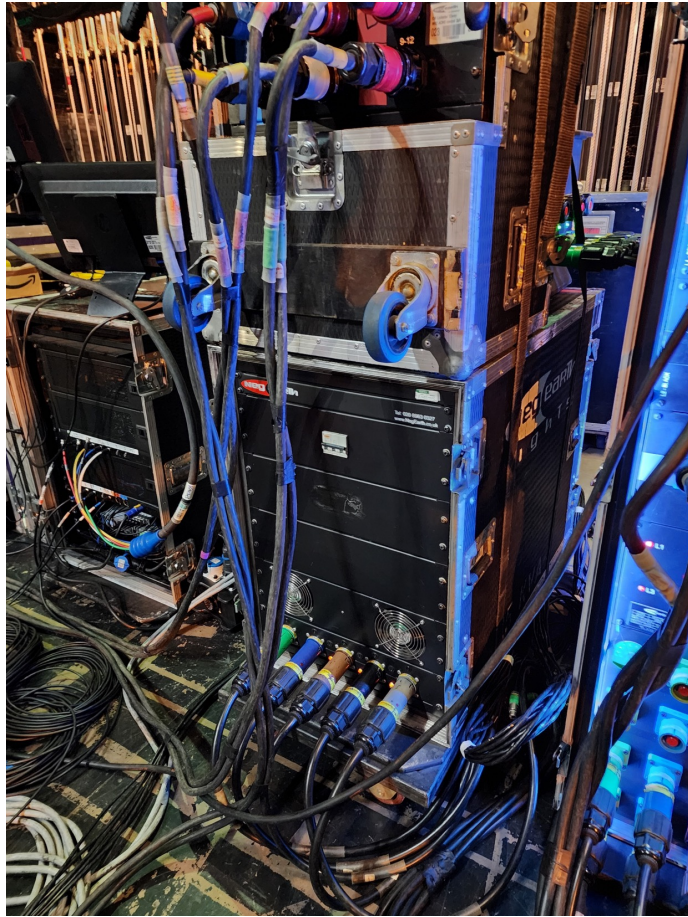
Cam-locks

- Green= Ground
- White=Neutral
- Black=Hot Leg 1
- Red= Hot Leg 2
- Blue=Hot Leg 3

Always tied in first and tied out last
Always tied in second and tied out 2nd to last



Dimmer Beach Photo Akron Civic Theatre



Lighting Troubleshooting

TROUBLE SHOOTING ELECTRICS

1. Is the unit plugged in?
2. Does the circuit have power? Cross plug another unit to see
If not, why not?
Is the dimmer up?
Is the dimmer on? This might be a last step at E. J. because the dimmers are in the basement
3. If the circuit is hot, is the lamp good?
First bring up a circuit next to the unit and cross plug
If you get light, the lamp is good
4. If the circuit is hot and the lamp is good, next comes taking the plug on the unit apart to see if there is a loose wire.
5. If you still can't get the unit to work, take it down and replace it and don't waste any more time. Put it on the bench with any information you have.
6. Always work from the easiest problem to solve (i.e. plugging in the unit) to the hardest problem (bad dimmer)

THEATRE MATH

PATRICIA
DONOVAN

Order of Operations

P	E	M	D	A	S
Please	Excuse	My	Dear	Aunt	Sally
Parenthesis	Exponents	Multiplication	Division	Addition	Subtraction
		<i>Work from left to right</i> →		<i>Work from left to right</i> →	
() { } []	n^2 $\sqrt{\quad}$	$\times \cdot *$	$\div /$	+	-

Simple Math

- Area (ft²) = Length x Width
- Basic addition, subtraction, multiplication, division

Examples of such!!

$$137 \times 1184 = 162,208$$

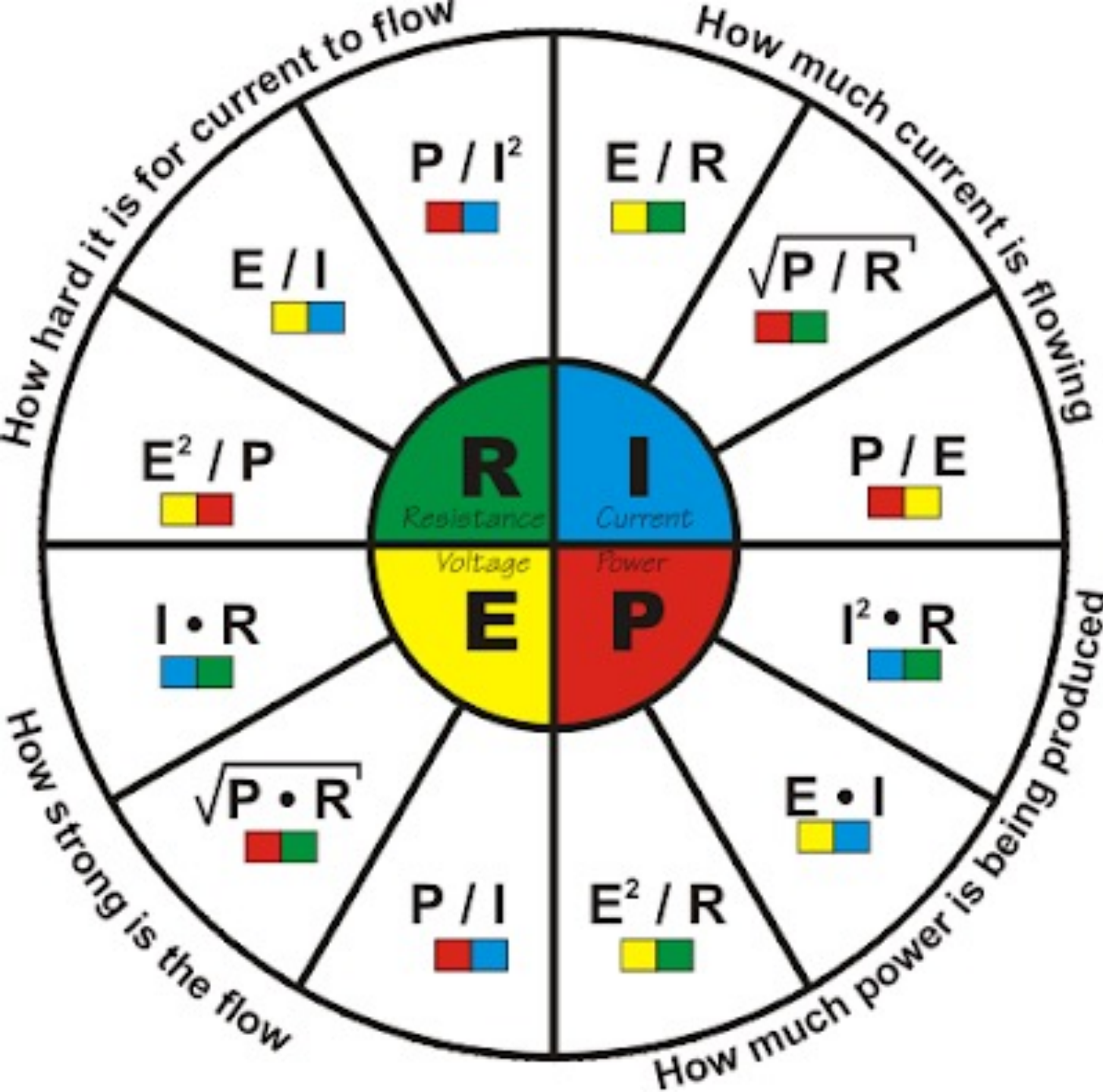
$$27 + 147 = 174$$

$$127 - 89 = 38$$

$$27 / 9 = 3$$



Electrical Math



- P = Watts - The rate of energy conversion
- R = Ohms - The electrical resistance
- I = Amps - The amount of electricity passing through a point
- E = Volts - The potential electrical difference between two points



RIGGING PARTS AND KNOTS

MARK ASHMORE

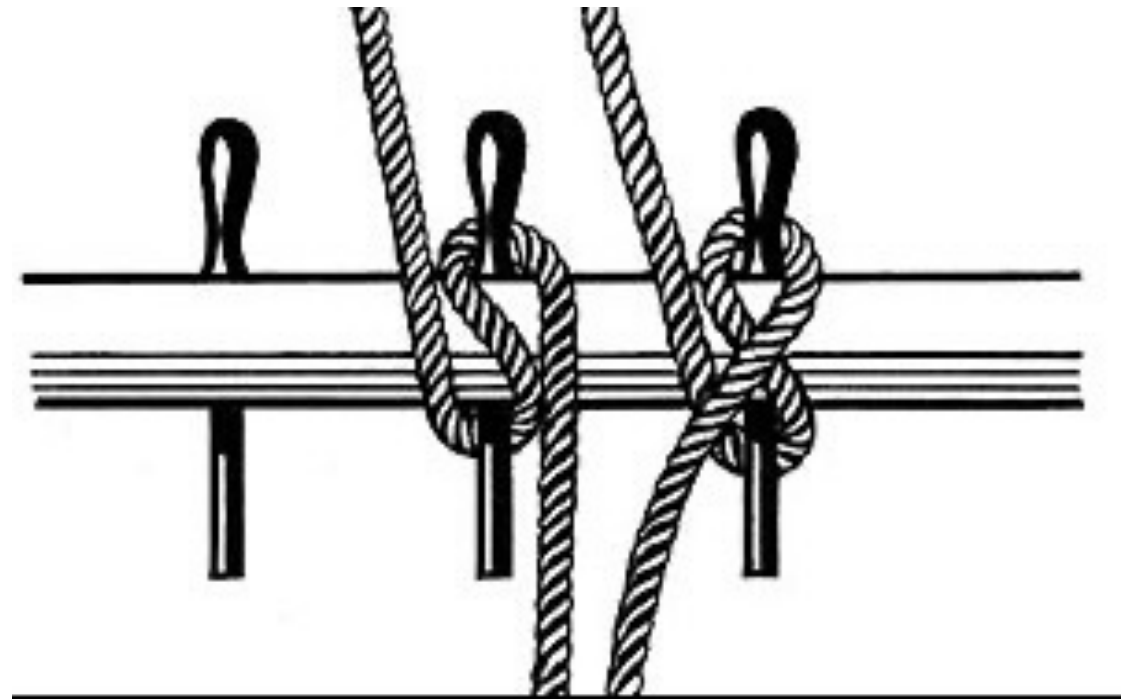
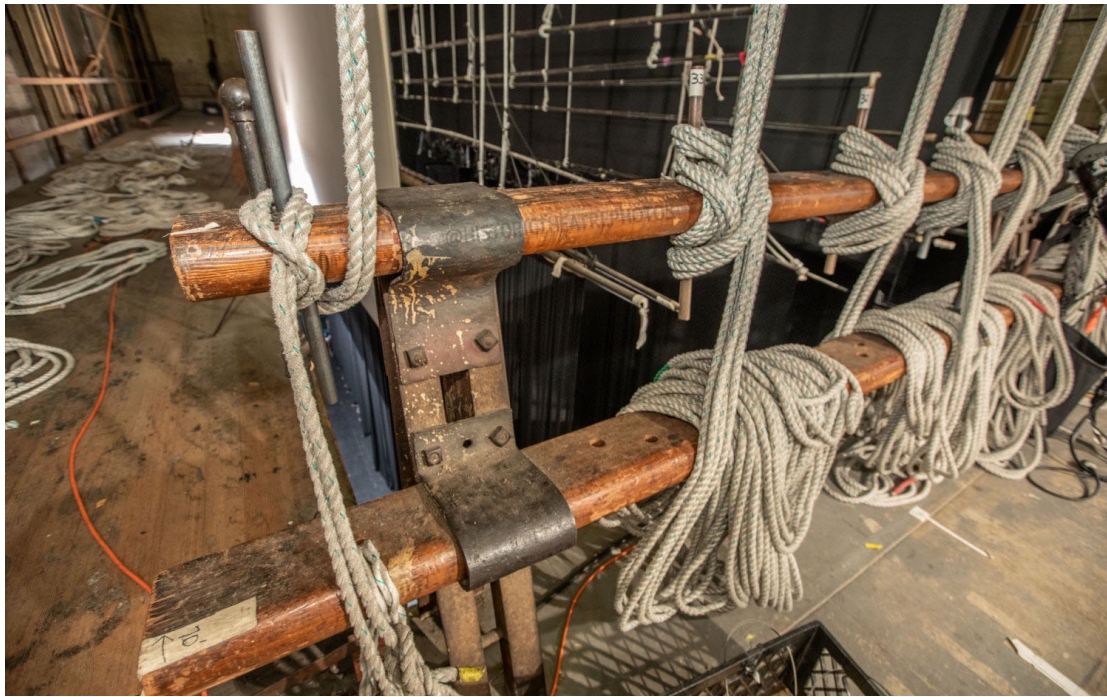
&

Kellie Rossini

Rigging parts: spanset, shackles, thimbles and chain motors.



Pin rail tie off or Belay knot (Spreckels Theatre, San Diego)

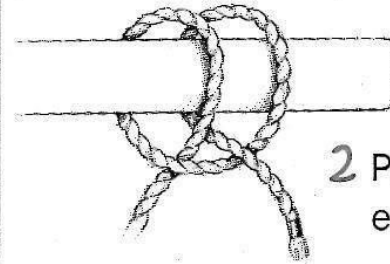
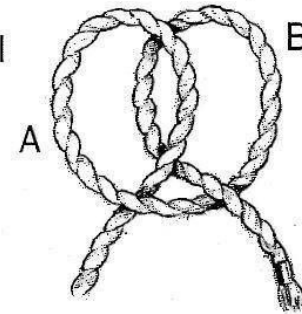


CLOVE HITCH

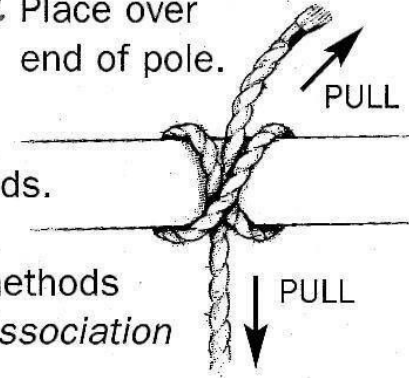
Clove hitch

Attaches a rope to a pole. Will not slip under strain if the pull is straight.

- 1 Make two identical loops. Pass A in front of B.



- 2 Place over end of pole.

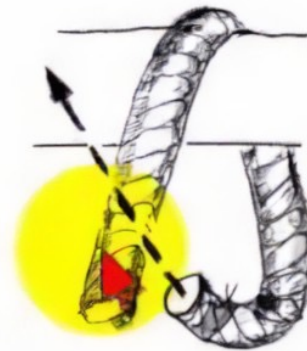


- 3 Pull both ends.

For alternative methods see *The Guide Association Knot Book*.

Clove Hitch knot

How to Tie the Clove Hitch Knot



1

Pass the bitter end over the rail. Then, loop the bitter end back over the standing part.



2

Lift up the loop. Pass the bitter end underneath the loop.

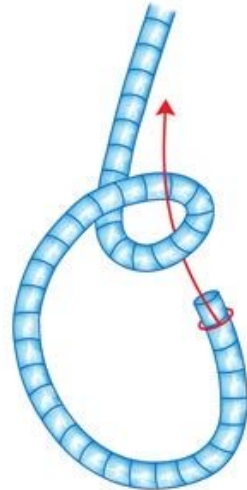


3

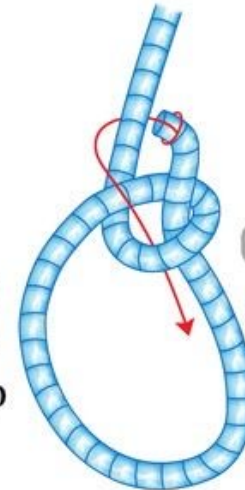
Pull on the bitter end and bunch the turns up at the same time. Remove all slack to tighten the knot.

Bowline knot

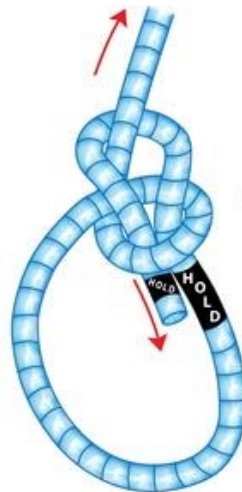
Bowline Knot Directions



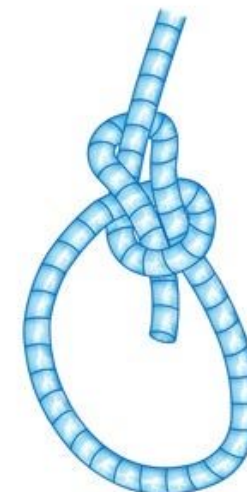
1 Pass the tag end through the rope loop



2 Pass it behind the standing part and through the loop again

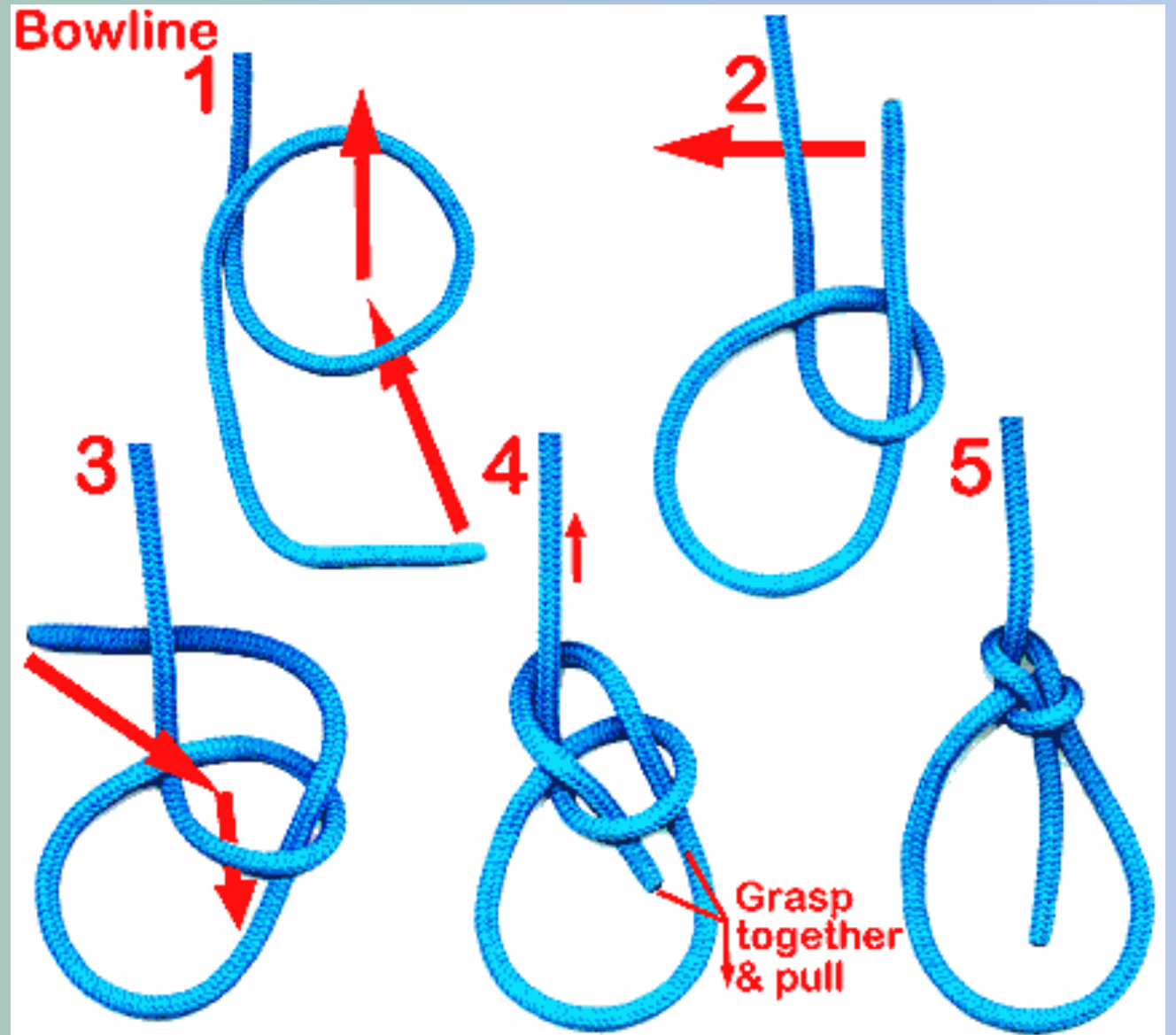


3 Hold the loop and tag end and pull to tighten



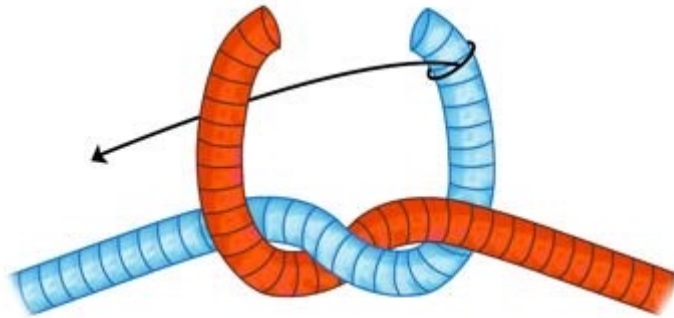
4 The knot is made

Bowline

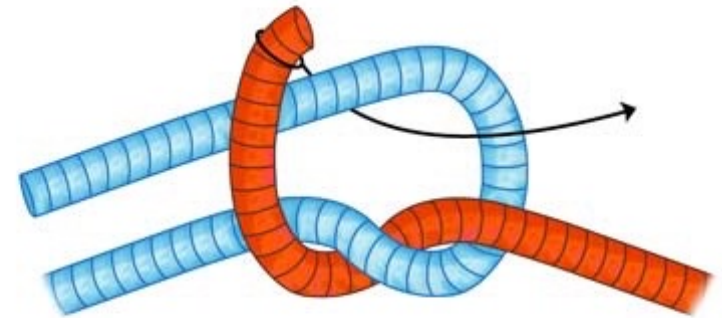


Square knot

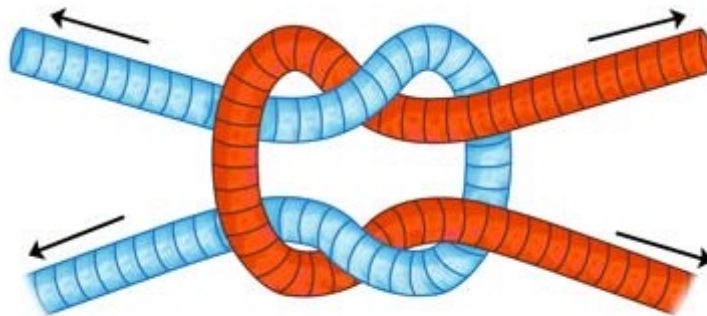
Square (Reef) Knot Instructions



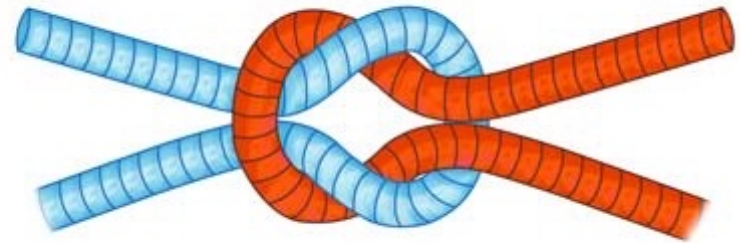
1 Cross the blue and red ends



2 Pass the red end through the blue loop



3 Pull the ends to tighten



4 The knot is complete

Other items to be aware of

Truck safety

Pay attention

Keep talking to a minimum

Watch how boxes come off truck

- ej run the rail
- watch where fingers and toes are

ONE person talks to tow motor driver they generally choose that person

Get yourself a set of gloves and shoes. Might have to go thru many pairs to figure out which type you like

Above all NO SMOKING ON ramp or near truck.

-
- Finally check website this power point is under the Education tab.
 - Also, look at our general work rules. There are questions taken from here for the test.
 - Some of our places have dress code. Yes, you can wear shorts at EJ, Canton, Blossom and Civic but the must be seamed shorts NO Cut OFFs. Knight Center collared shirts with no logos on them and NO Shorts there.
 - Please watch the language on your shirts.
 - Test is Five dollars (\$5.00) cash for administrative costs.

Theater Information

1

Civic loading dock address is 55 west Bowery ST. This is where most of the shows will be.

2

Civic front address 182 South Main street

3

Knight stage 176 South Main Street. (glass doors before the Civic Marquee)
Can get thru under the Civic Marquee.

4

EJ Thomas is 131 Hill street. Go to Blue stage door.

5

Goodyear 1201 East Market Street, Akron 44305

6

Canton Memorial Civic 1101 Market Ave North.

7

Have money for parking and lunch.