

# Tech Challenge 2017

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Ohio Tech Challenge is based on International Tech Challenge, but events may differ from the International rules. Tech Challenge will be held in the Cafeteria, on Saturday evening. One person from each team should check-in with the person at the sound system.

*Adapted from the EdTA website / Tech Challenge*

## Drop Fold (6 people)

The team must work together to fold a drape for storage.

### Recommended Sequence

Prior to the event, the drape will be crumpled in a disorganized pile on the stage floor. The team members should plan ahead who will be at each corner as the drape is folded and who should check for the crispness of each fold or pleat.

1. Leave the start line
2. Pull the drape out flat on the floor
3. Determine the Center Line
4. Make the first fold to one end
5. Continue folding till appropriate width
6. Drape should be folded to the top (where the tie lines are). The label should be plainly visible.
7. Carry the folded drape and place it on the sizing template
8. Team returns to the finish line and one member says "DONE!"

Penalties – Add the following to score if:

A. Folding with the good side facing outward	10 s.
B. Way off center – not folding on center line	5 s.
C. Bad folds or pleats	5 s.
D. Tie lines not visible/accessible	5 s.
E. Judgment of teamwork – no arguments	5 s.
F. Label not visible	5 s.
G. Folded drape size too big or too small	5 s.

# How to Fold a Drop

Backdrops and other soft goods (curtains) are necessary in every production by providing scenic elements and masking the backstage areas. When the goods are not hung on a batten for show use, there is a particular way that the goods should be folded for safe storage and easy identification. The method that is described below is the most common method used. However, it is not the only method in practice.

Step 1. Place backdrop on a clean stage floor face (painted or nap side) up. Make sure the drop is smooth and free of any wrinkles.

Step 2. The next step requires four (4) people. Together fold the pipe pocket (lower corners) to the webbing (upper corner).

Step 3. Fold again from lower edge to the webbing (top) and smooth out any wrinkles.

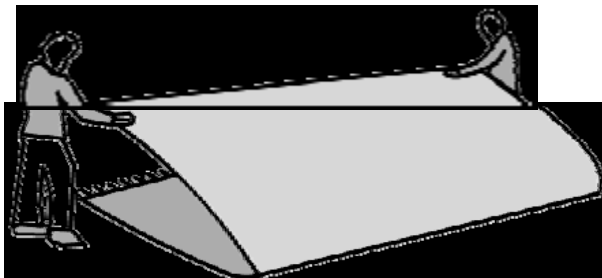
Step 4. Fold again in the same manner until the backdrop is approximately 3 feet wide. Again smooth out any wrinkles or creases.

Step 5. Fold hemmed edges toward the center, leaving enough space for the final book fold (approximately 1' to 1'6").

Step 6. Fold edges towards the center again in the same manner until the backdrop can be folded into a square of 2 to 3 feet.

Step 7. Fold the two halves of the drop back on themselves, creating a book like shape with one open end.

Step 2



Step 3



Step 4



Step 5



Step 6



# Costume Quick Change (4 people)

The contestant must help an actress/actor to make quick change.

## Recommended Sequence

1. Leave the start line
2. Give 15 seconds of prep time before letting performer in
  - a. Actor will enter even if contestant isn't ready
3. Actor will be fully dressed in scene 1 outfit
4. Actor can help during change
5. Assist the performer out of scene 1 outfit (actor can help)
  - a. Undo fastening
  - b. Help lift over head or off arms
6. Assist the performer into scene 2 outfit
  - a. Do fastenings – Must be completely buttoned, zippered, laced
  - b. Put on hats or accessories
7. Re-change scene 1 outfit
8. Once set, the contestant runs to the finish line

Penalties – Add the following time to a score if:

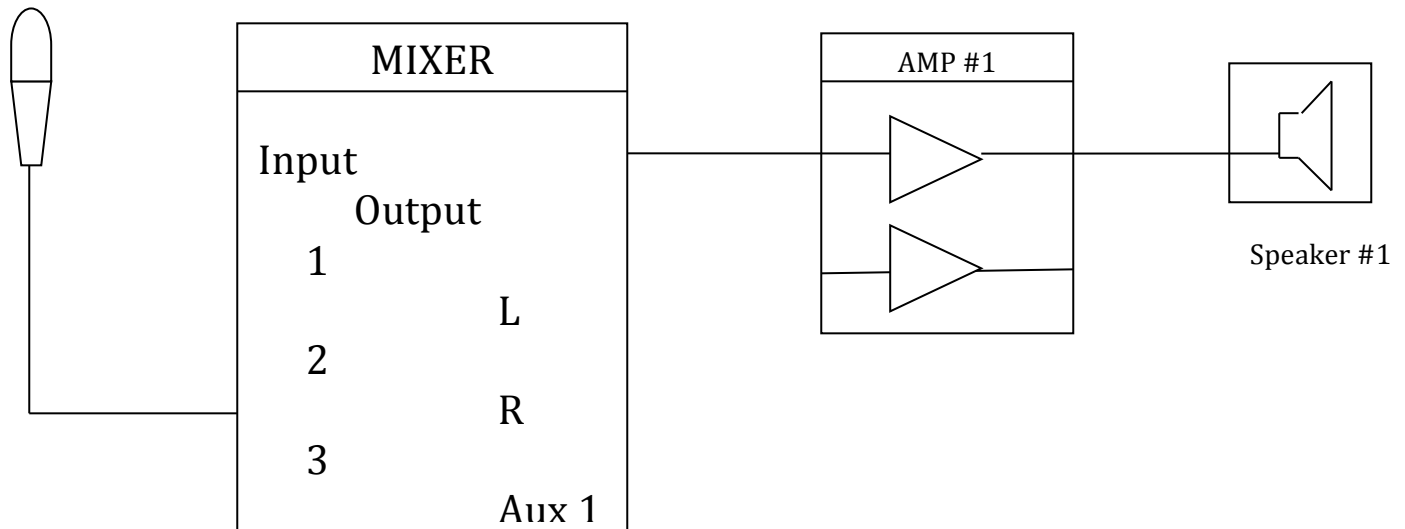
Judging based on speed, smoothness of change, and final look	
A. Not prepped in 15 sec.	2 s.
B. Scene 2 clothing properly placed on actor (snapped, hooked, laced, etc.)	10 s.
C. Missing Accessories – hat, scarf...	5 s.
D. Unnecessary roughness of the actor	5 – 15 s.
E. Scene 1 outfit not hung up or placed on hangers properly	5 s.
F. Dropping hanger, unnecessary noise backstage	5 s.

# Sound System Hook-Up (2 People)

In theatre today sound is crucial to each production. From **amplification** of the actor's voice to **recorded playback** of **sound effects** or **music**, the **Sound Engineer** is vital to the success of the production.

In this challenge individuals will be asked to assume the role of the Sound Engineer and hook up a basic sound system. This basic sound system will include a **Mixing Console**, **Amplifier (amp)**, **microphone**, and a **playback device**. For successful completion of the challenge, you must hook up the equipment in the correct manner, power on the system, and create sound using the two devices (microphone and playback device).

No sound	10s
Sound from only one speaker	5s
Level too hot / feedback	5s



## Light Hang and Focus (2 people)

### Recommended Sequence

1. Leave the Start line
2. Locate Fixture
3. Hang Fixture
4. Hand tighten C-clamp
5. Install safety cable
6. Wrench tighten C-clamp
7. Wrench tighten yoke bolt
8. Open shutters
9. Plug in fixture
10. Position fixture – Rotation and basic focus
11. Lock it: tighten pan screw and rotation knob
12. Sharp focus
13. Shutter cuts to shape
14. Drop in pattern holder
15. Check orientation and focus
16. Drop in gel frame
17. Back to finish line

Penalties – Add the following time to score if:

A. Instrument upside down	15 s.
B. Out of Sequence (tightened before safety)	10 s.
C. Forgot safety cable	10 s.
Not tight:	
D. C-clamp	15 s.
E. Vertical hold – yoke handles, wing nuts	10 s.
F. Horizontal hold – pan screw	10 s.
G. Focus knob and barrel knob	5 s.
H. Shutters not open before plugging in	5 s.
I. Shutter cuts (personal judgment)	5 s. per cut
J. Sharp focus (personal judgment)	5 s.
K. forgot gel frame and/or gobo holder	3 s.
L. Pattern upside down or backwards	3 s.
M. Placing any items in mouth	10 s.
N. Dropping items	10 s.
O. Gloves not worn at all times	5 s.

(ETC, Source 4)

### How to hang a lighting fixture (ellipsoidal)

1. Place C-CLAMP over the pipe at the designated hanging location.

*NOTE: the opening of the C-clamp should face the technician*

2. Adjust the PIPE BOLT so that it is secure on the electric pipe.

*NOTE: pipe bolt should be no tighter than 1/4 turn past finger tight.*

3. Attach the SAFETY CABLE through the YOKE and around the electric pipe.

4. Plug the TAIL of the lighting instrument into the designated CIRCUIT.

### How to focus an ellipsoidal

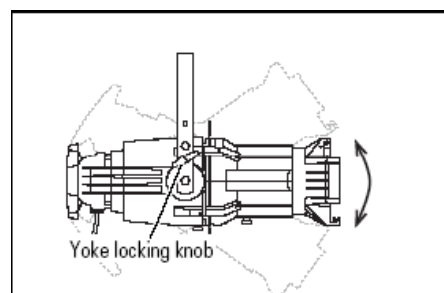
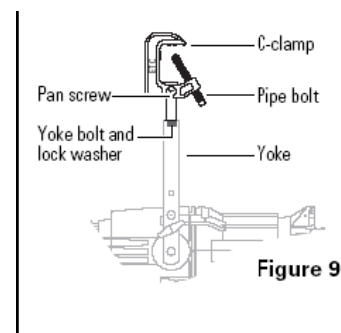
1. Adjust the PAN of the unit so that it is set in the desired location.

2. Adjust the TILT of the unit so that it is set in the desired location.

### Setting the angle within the yoke

1. Loosen the yoke locking knobs. (**Do not** remove them.)

2. Tilt the fixture to the desired position.



3. Tighten the yoke locking knobs to secure the fixture in position.

3. Focus the BEAM to the desired beam edge.

### Focusing the beam

1. Loosen the beam focus knob located under the barrel as shown in.

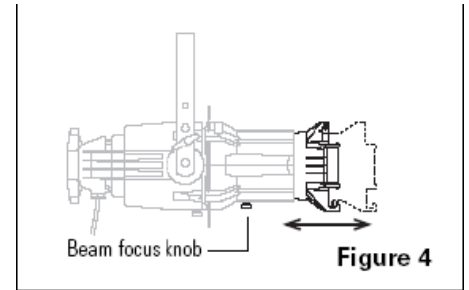
2. Slide the lens tube forward or backward to achieve the desired beam edge.

3. Once the fixture is focused, tighten the beam focus knob.

4. Using the SHUTTERS, shape the beam of light to the desired shape.

5. Make sure all nuts, handles, and knobs are locked down so that the instrument does not DROP FOCUS.

6. Drop COLOR into the color slot of the instrument.



## Platform Legging (2 people)

Timed event with a team of two students have to attach 4- 2x4 legs to a 3'X4' platform using the hardware and tools provided. Finish time is determined when the platform is legged and flipped over and placed on floor. There will be deductions for loose legs, improper hardware usage and un-technician-like conduct.

Un-technician-like Conduct	10s
Loose Legs	5s
Improper Hardware Usage	5s

## Prop Building (6 people)

Build the designated prop with the materials provided. This is a judged event. 15 minutes time limit.

1. The prop must be usable.
2. Points for design and creativity
3. Penalty for going overtime