



# Indiana Thespians Tech Challenge

Presented by ETC and USITT



Underwritten by IndyStage  
Also sponsored by DeLong Rigging and Canto USA



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## General Rules

1. All participants must be registered delegates to the state conference.
2. The number of participants per team is limited to four (4); each school may have a maximum of two (2) teams. A “blended” team can be created with members of more than one school if need be.
3. Every team member should try to complete all 5 events whether it be an individual, pairs, or team event. However, at minimum, each event should be completed once.
4. You may make two (2) attempts at each event, however the second attempt **MUST** be made immediately following the first.
5. If schedule permits, there will be a practice/workshop session before the start of Tech Challenge (check the conference schedule once it is released). During this time, we welcome Tech Challenge teams and anyone else interested in Tech Challenge to practice and learn each event. Once judging has begun, practice attempts will not be allowed.
6. Please be on time for the start of Tech Challenge. We understand many things are happening at once and you might be running a little late. Keep in mind that our judges are volunteers and have donated their time to make this event happen. As a courtesy to them, arrive and begin your events as soon as possible. If a team or individual has not checked in and begun the competition within one hour of the start, you can be disqualified.

## General Information

1. Participants should feel free to ask the judges questions to help clarify rules or procedures. However, this is not the time to be taught how to do the event.
2. Spectators are welcome and encouraged to cheer on the technicians as they compete in their events. We do ask that spectators stay off the competition floor.
3. Tech Challenge staff may adjust rules or procedures as needed based on facility or time restrictions. Our goal is for each event to be run consistently so each participant is on an equal playing field.

### Good Sportsmanship

All teams are required to show good sportsmanship which means being respectful and supportive of other teams. If a team exhibits poor behavior, they may be removed from the event.

**EVENT 1 – LIGHT A GEOMETRIC SHAPE**

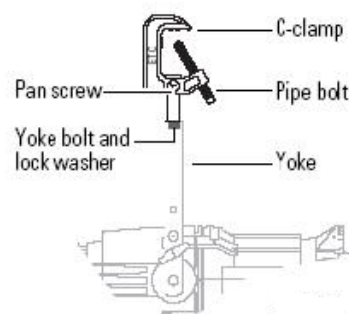
Single person event

**Event Overview:** The ellipsoidal instrument will be hung, turned on, and focused. With the framing shutters, a geometric shape is created (a rectangle, rhomboid, or parallelogram) on the wall with a tightly focused beam. The shapes are outlined with spike tape and now become the target for the event. In the interest of time, we **will not** be using the gobo and holder, or clarifying “donut.” An adjustable wrench and gloves will be provided, **speed wrenches may not be used.**

1. When the contestant walks up from the starting line, he/she should find a wrench, gloves, gel frame, and ellipsoidal spotlight sitting vertically on its lens tube (out of focus) with all shutters shoved in. For safety reasons participants must wear glove during the event as the fixture will get hot. Putting on gloves will be done “off the clock” before beginning.
2. Picking up the instrument and wrench, the contestant goes to the boom stand, hands the unit on the 1 ½” pipe, hand-tighten c-clamp, attaches safety cable, tightens c-clamp with wrench, pulls out all shutters (perpendicular to body of instrument), plug unit in, aim unit so its centered over taped pattern, sharpens focus, and frames the beam to inside edges of the taped target and tightens all clamps/screws.
3. The judge will tap the unit and it should not move at all. If it does move from where the contestant left it, seconds will be added to the time as a penalty.

**Order of steps:**

1. Leave the start/finish line (located 5 feet from fixture and 10 feet from pipe)
2. Locate fixture and give it a quick inspection for any visible damage
3. Hang fixture
4. Hand tighten C-clamp
5. Install safety cable
6. Wrench tighten C-clamp main bolt
7. Wrench tighten yoke bolt
8. Open all four shutters
9. Plug in fixture
10. Focus fixture and adjust pinch bolt if needed
11. Make necessary shutter cuts
12. Adjust barrel rotation if need be
13. Tighten pan screw (side pinch-bolt) and rotation knob
14. Drop in the gel frame
15. Re-check the focus if need be
16. **Time will stop once all steps are complete or if maximum time is reached.**

**Maximum time: 4 minutes**

**Scoring:** Record number of minutes and seconds (to 2 decimal places) to accomplish all steps.

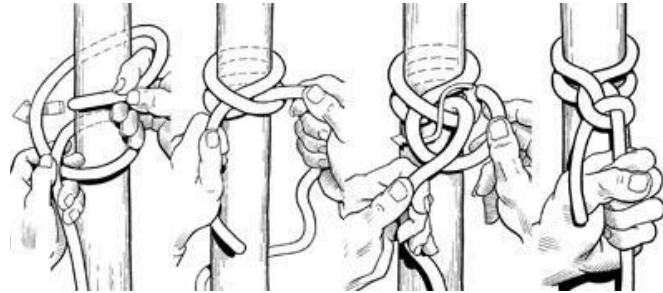
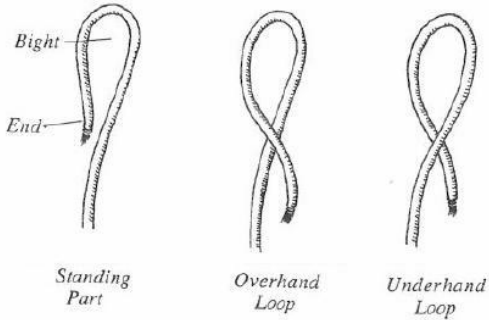
**Penalties:** Add designated time to score if:

Instrument is upside down	+15 seconds
Out of Sequence (e.g., not hand tightened before the safety cable is added)	+5 seconds
Forgot safety cable	+10 seconds
Instrument not tight: C-clamp	+5 seconds
Vertical hold / yoke handles, wing nuts not tight	+10 seconds
Horizontal hold / pan screw not tight	+5 seconds
Focus knob not tight	+5 seconds
Shutters not open before plugging it in	+10 seconds
Incorrect shutter cuts (judge's decision)	+10 seconds
Sharp focus (judge's decision)	+10 seconds
Forgot gel frame	+3 seconds
Forgot to latch gel frame	+2 seconds
Glove not worn from start to finish	+10 seconds
<b>Blatant disregard for rules or procedures</b>	<b>Disqualification</b>

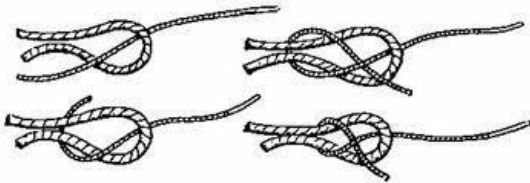
**EVENT 2 – KNOT TYING**

Single person event

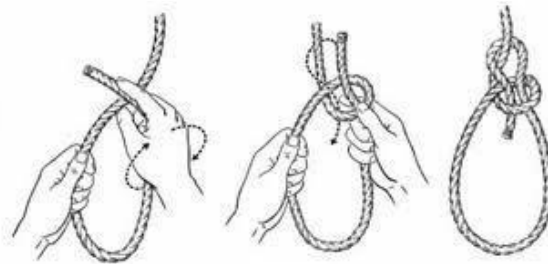
**Event Overview:** The ability to tie basic knots is essential for technicians. This fundamental stagecraft skill is used every day in tasks including hauling equipment to the catwalk or properly rigging scenery. Participants must tie each knot correctly with a minimum 6” tail on all knot ends. Time ends when contestant put hands up and says “Done!” Ropes will be nylon or polyester, minimum 6 feet in length, and minimum of ½ inch diameter. Click on the links below each knot for an animated demonstration.



[Clove hitch](#) with [half-hitch](#)



[Sheet-bend](#)



[Bowline](#)

**Order of Steps:**

1. Leave the start line (located 10 feet from pipe, ropes will be draped over pipe).
2. Tie a clove hitch around pipe.
3. Tie a half hitch on top of clove hitch.
4. Tie second line to the first with a sheet bend.
5. Use the end of the second line and tie a bowline. You may use one or two hands to tie the bowline around your waist, leg, or some other object.
6. **Time will stop once all steps are complete or if maximum time is reached.**

**Maximum time: 2 minutes**

**Scoring:** Record number of minutes and seconds (to 2 decimal places) to accomplish all steps.

**Penalties:** Add designated time to score if:

Placing rope around neck or in the mouth	+5 seconds
Outside bowline: Tail on <b>outside</b> of loop	+3 seconds
Sheet bend: Tails on <b>opposite</b> sides	+3 seconds
Knot incorrectly tied	+5 seconds
Knots not pulled tightly (correctly tied, but left loose)	+2 seconds
Failure to follow the sequence	+5 seconds
Doesn't attempt or complete a knot	+10 seconds
<b>Blatant disregard for rules or procedures</b>	<b>Disqualification</b>

**Event 3 – Props Shift**

Two-person team event

**Event Overview:** The participants will strike existing props from a given “on stage” table to a marked “off stage” table, and then take a different set of props from “off stage” and properly arrange them on the “on stage” table.

**Order of Steps:**

1. Leave the start/finish line (located 10 feet from “off stage” table).
2. Clear all items (plates, glasses, silverware, tablecloth) from “on stage” table and place them in the proper location “off stage.”
3. Take items from the “off stage” table and properly set them on the “on stage” table.
4. **Once all items have been set, both participants must cross finish line for time to stop.**

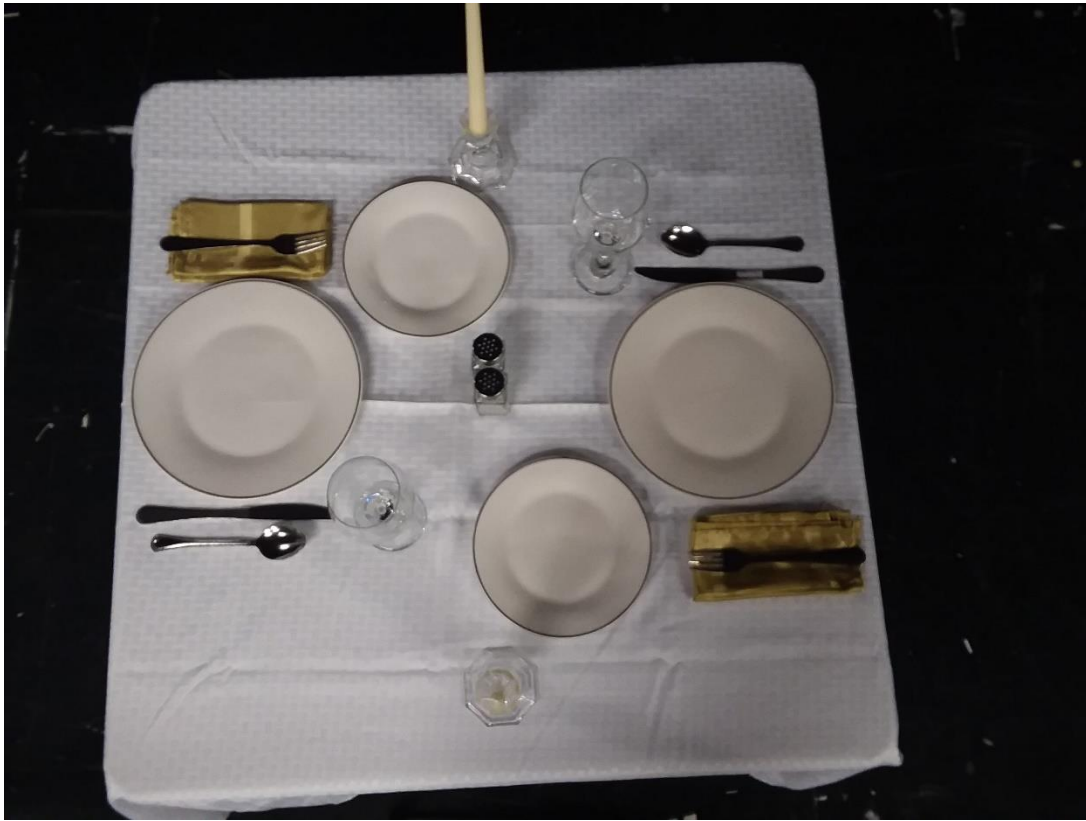
**Maximum time: 3 minutes**

**Scoring:** Record number of minutes and seconds (to 2 decimal places) to accomplish all steps.

**Penalties:** Add designated time to score if:

Dropped prop	+10 seconds
Excessive Noise (judge’s discretion)	+5 seconds
Missed mark on set table	+5 seconds
Placing any item in the mouth	+5 seconds
Improper position, missed mark on set table	+5 seconds per item
Tablecloth not set in proper orientation - US/DS	+3 seconds
Wrong prop placed on table	+5 seconds
Lack of teamwork	+30 seconds
<b>Blatant disregard for rules or procedures</b>	<b>Disqualification</b>

+++++PROPS SHIFT LAYOUTS+++++  
AUDIENCE



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AUDIENCE



**Event 4 – Leg a Platform**

Two-person team event

**Event Overview:** The platform will begin legs up, two legs will be bolted to the platform and two will not. Each participant will be responsible for attaching and removing a leg. The platform will be 36”x36” framed with 1x4 with a 1x4 leg for each corner. Leg holes will be drilled slightly larger than the 3/8” hex bolts used. At no time will the platform be turned over on its legs.

**Order of Steps:**

1. Both team members leave the start/finish line (located 5 feet from tools and 10 feet from platform).
2. Each member picks up a wrench and ratchet from the table.
3. Each member attaches a leg. Hardware sequence should be bolt, washer, wood frame of platform, leg, washer, lock washer, nut (on inside of platform).
4. Using the same tools, each member removes the other legs.
5. Removed legs and hardware should be placed in the corners of the platform where they were removed.
6. Time will stop once all steps are complete and both participants cross the finish line or if maximum time is reached.

**Maximum time: 5 minutes**

**Scoring:** Record number of minutes and seconds (to 2 decimal places) to accomplish all steps.

**Penalties:** Add designated time to score if:

Loose legs (judge’s discretion)	
Slight wiggle	+5 seconds
Medium wiggle	+10 seconds
Very loose wiggle	+15 seconds
Placing items in mouth	+10 seconds
Incorrect hardware placement (per occurrence)	+10 seconds
Failure to follow proper sequence	+5 seconds
Lack of teamwork	+30 seconds
Blatant disregard for rules or procedures	Disqualification

**Event 5 – Fold a Drop or Curtain**

4-person team event

**Event Overview:** The drop or curtain will start lying flat on the floor. The team will fold the drop or curtain for storage until it fits in a designated space. We will be using a 12' x 20' canvas tarp with tie lines on the long edge.

**Order of Steps:**

1. Leave the start/finish line (located 10 feet off corner of drop).
2. The participants may choose one of three methods to finish the process; fold to center, accordion pleated style, or rolling, as long as the finished product is neat and fits in the designated space. The tie lines should appear no matter which method is used.
3. The folded drop should fit within the perimeter of a taped rectangle on the floor (located opposite of start line, 10 feet off corner of drop).
4. Time will stop once all steps are complete, and all participants cross the finish line or if maximum time is reached.

**Maximum Time: 3 minutes**

**Scoring:** Record number of minutes and seconds (to 2 decimal places) to accomplish all steps.

**Penalties:** Add designated time to score if:

Bad folds	+5 seconds
Tie lines not visible	+5 seconds
Folded drop size outside of taped perimeter	+5 seconds
Stepping on drop	+10 seconds
Lack of teamwork	+30 seconds
Blatant disregard for rules or procedures	Disqualification