AUDIO/RADIO PRODUCTION (VIRTUAL)

PURPOSE
To evaluate each contestant’s preparation for employment and to recognize outstanding students for excellence and professionalism in the field of audio/radio production.

First, download and review the General Regulations at: http://updates.skillsusa.org.

ELIGIBILITY
Open to a team of two active SkillsUSA members enrolled in career and technology programs with audio/radio production as an occupational objective.

CLOTHING REQUIREMENT
Class E: Contest specific — Business Casual
- Official SkillsUSA white polo shirt.
- Black dress slacks (accompanied by black dress socks or black or skin-tone seamless hose) or black dress skirt (knee-length, accompanied by black or skin-tone seamless hose).
- Black leather closed-toe dress shoes.

Contest Clothing Notes (Apply ONLY to Virtual Competitions):
- Official SkillsUSA Competition Clothing recommended but NOT required.
- Contestant clothing options include the following:
  - Official Competition Clothing.
  - Trade Appropriate Clothing.
  - Professional Dress.
  - Business Casual.
- Clothing must meet industry safety standards.
- No identification of the contestant, school or state is allowed on clothing.
- No offensive, vulgar or inappropriate images or text are allowed on contestants clothing.
- No shorts or sleeveless shirts are allowed.
- Skirts must be at least knee-length.

- Proper Personal Protective Equipment (PPE) must be worn by contestant to meet all state, local and school requirements due to COVID-19.
- Scoring deductions may only be given and/or disqualification of contestant if clothing safety standards are not met.

These regulations refer to clothing items that are pictured and described at: www.skillsusastore.org. If you have questions about clothing or other logo items, call 1-888-501-2183.

EQUIPMENT AND MATERIALS
1. Supplied by the technical committee:
   a. Theme and objective for production
   b. Additional/updated information to assist students in preparing for the contest may be posted online annually at: http://updates.skillsusa.org/

2. Supplied by the contestants:
   a. Computer with high-speed internet capability and camera to use applications such as Zoom, Teams, etc. The minimum recommended internet bandwidth speeds for joining Zoom meetings, accessing on-demand curriculum and other online operations is 2.0 Mbps up and down. You can test your current internet speeds by following this link: www.speedtest.net. Allow the page to load and click on GO.
   b. A secondary camera(s) may be required to provide judges with the ability to view contestants from different angles. Additional camera requirements will be located on the SkillsUSA website at http://updates.skillsusa.org.
   c. A contest Proctor will be required to be on site to assist judges. A local industry expert is preferred to serve as the Proctor and shall not be an individual that has been involved with the training of the contestant(s). The Proctor will serve as the onsite “hands and eyes” for the judges. Proctor will follow instructions from the judges for safety and operations related to the competition. Proctor may be asked by judges to perform several tasks such as operating a portable camera to show
specific components or steps, measure parts, or any task that will provide judges with information needed to assist in accurate scoring of the contestant's work or presentation. However, the Proctor shall not serve as a judge nor have any influence on contestant scores.

d. The contestant's instructor or advisor shall be on site to observe all competition activities to ensure a safe and healthy competition experience for all participants. That instructor or advisor will not be allowed to interact or interfere with the competitor unless a safety issue arises that requires interaction. Any other support or interaction between the contestant and the instructor/advisor will result in disqualification.

e. All competitors must create a one-page résumé and submit an electronic copy to the technical committee chair at least seven (7) days in advance of the competition. Failure to do so will result in a 10-point penalty. Instructions for submission of the electronic résumé copy will be provided on the SkillsUSA website at http://updates.skillsusa.org.

f. Facilities and power to edit final product

g. Audio equipment, cables and connectors

h. Portable digital audio recorder with removable recording media

i. Microphone with audio cable

j. Method of importing digital audio from field recorder to editing system

k. Audio editing software/system (use of laptops is strongly encouraged)

l. Writing implement (pen, pencil, marker, etc.)

m. USB flash drive

n. Scratch paper for notes

o. Headphones (not ear buds)

p. One-page typewritten résumé

q. Production music CD (see note)

r. Surge-protected power strip

Note: Production music is not commercial music purchased in stores. It is music created for use in audio and video productions. Some production music companies are: Music Bakery, Production Garden, TM Studios and Omnimusic. Production music may also be created using programs such as GarageBand, Soundtrack or ACID.

Scope of Contest
Each team will be comprised of two student members from the same school and same division, one specializing in Radio and the other in Audio Production.

Knowledge Performance
A written knowledge exam of as many as 50 questions will be given covering the standards and competencies of listed on the following pages, including basic digital audio recording and editing, equipment, cables and connectors, and terminology.

Skill Performance
The contest includes an assignment to produce a final project on site as determined by the national technical committee.

Contest Guidelines

Note for Virtual Competitions: Contestants may not be required to perform all the standards and competencies listed in this and the following sections. However, contestants should be prepared to perform components in all areas. Prior to the competition, the technical committee may determine which standards and competencies contestants will be perform for the virtual contests. The technical committee will determine if additional information is needed for contestants prior to the competition. These changes will be posted on the SkillsUSA Championships contest update website at: http://updates.skillsusa.org.

Written Exam
1. Contestants will take the exam individually.
2. Both teammates' scores will be averaged together on the score sheet.
3. Contestants competing as "Radio Talent" will be responsible for knowledge
including radio production, mass communications, and radio history.

4. Contestants competing as the “Audio Technician” will be responsible for aspects of producing quality audio.

5. Contestants may use any textbook or other materials to prepare for the exam. The technical committee and NET recommend using one or more of the following textbooks:
   e. Cyber College, (www.cybercollege.com). Use both the “TV Production” (TVP) and “Elements of Mass Communication” (EMC) online texts (TVP: the “Scriptwriting Guidelines” module and all of the modules in the “Audio” section; EMC: the modules in the “History and Development of Radio” section).

6. Both teammates’ scores will be averaged together on the score sheet.

While specific chapters generally aren’t mentioned in these textbooks, competitors are encouraged to use the following standards and competencies to guide their studying.

**Contest Assignment**

1. Audio and information will be gathered on location as needed to convey the assigned theme or objective.

2. Students are to fully produce (plan, write, voice, record, edit, render, etc.) a five-minute radio production such as a PSA, NPR-style soundscape, sound-rich/NPR-style news story, sound and interview only news story, etc. A 30-second ad spot will be produced and inserted into the production. The complete production requires students to demonstrate their ability to plan a project that meets a specific prompt and run time; gather, edit and mix a variety of audio sources; and render the completed project to a specified audio file.

3. The completed production must meet the assigned run time and convey an adequate representation of the subject or theme.

4. Designated time periods over two days will be provided for script research and development, rehearsal of the script, generation of written copy, field recording, booth voiceover recording, and editing the final project.

5. Emphasis will be placed on:
   a. Professional production of the audio/radio production by industry standards
   b. Quality of the audio
   c. Conveyance of the subject, theme and information to the listener

6. Location of contest will be determined by the national technical committee.

7. All teams will submit their projects including final production and script on a USB flash drive with a file name and format chosen by the technical committee.

8. Contestants will demonstrate their ability to perform jobs or skills selected from the following list of competencies as determined by the technical committee:

**Audio Technician**

a. Demonstrate knowledge of audio production technology, including proficiency in digital audio recording, editing and mixing.

b. Demonstrate knowledge of terminology for mic level, line level, dynamic range, microphone preamp, compressor/limiter, XLR cable, XLR connector, EQ, time-based processing, send, return, input, output, balanced, and unbalanced.

c. Demonstrate working knowledge of microphones, microphone preamps, compressor/limiters, EQ, send, return, level control, and digital audio editing on a DAW (Digital Audio Workstation).
Radio Talent:
a. Demonstrate proficiency in planning a radio production, including the proper commercial script form.
b. Demonstrate knowledge of terminology for script, script form, copy, target demographic, live tag, intro, outro, format, 60-second spot, 30-second spot, PSA, broadcast, network, run time, voice over, FCC, and mic technique.
c. Demonstrate practical knowledge of scriptwriting, pre-production story development, radio advertising development, proper microphone technique.

9. Teams that do not turn in their produced audio/radio production and script within the time limit will have 20 points deducted from their final score, plus 1 point for each additional minute past the deadline.

10. Contestants should not arrive at the contest area any earlier than 15 minutes prior to the assigned session.

11. Teams that are late to their assigned editing station will have that time deducted from their allotted time.

12. The finished production must meet the run time determined by the contest committee (plus or minus one second) Points will be deducted if the spot is outside the one-second tolerance.

13. If a team experiences a problem with its equipment, it is the team’s responsibility to fix the problem. No extra time will be given for equipment problems. Teams may choose to bring in a second editing system in case of equipment problems, but no extra space will be given for the second system. The contest committee strongly encourages the use of laptops.

14. Teams may edit by using whatever software or method they choose, but they must supply their own equipment.

15. State and regional contests should mirror these requirements as closely as possible but may be adjusted to be completed in one day. Adjustments could include simply giving less time to complete the production and/or assigning a shorter run time for the assigned project. At the regional and state levels, this contest could also be run in partnership with the Television (Video) Production contest.

Standards and Competencies

AP 1.0 — Plan an audio/radio production, including the proper commercial script form demonstrating digital audio recording, editing and mixing

1.1 Demonstrate processes in digital audio recording
   1.1.1 Record natural sound on location characterizing the unique sound of that location
   1.1.2 Perform interview on location with an understanding of the purpose and goals of the audio/radio production
   1.1.3 Demonstrate proper techniques in writing the script inclusive of the target audience
   1.1.4 Demonstrate proper techniques in performing voice over on location

1.2 Demonstrate processes in digital audio editing and mixing
   1.2.1 Perform digital audio editing and mixing using a standard application to change and enhance the audio for the target audience
   1.2.2 With full consideration of the script, choose and integrate the appropriate audio/radio elements to enhance the presentation for the target audience

1.3 Define and give appropriate examples of the following audio/radio trade vocabulary: send, return, line level, mic level, analog, scrubbing, digital, mixer, target group, demographics, live tag, format, run time, PSA, ASCAP, BMI, SESAC, SoundExchange, commercial, FCC, voice over

AP 2.0 — Demonstrate knowledge and use of cables and connectors used in audio/radio production

2.1 Show use of the following audio connectors (male and female for each): XLR, ¼" balanced, ¼" unbalanced, and RCA/phono plug

2.2 Describe pin configuration of balanced cables

2.3 Describe pin configuration of unbalanced cables
AP 3.0 — Implement the skills and knowledge needed to describe and demonstrate audio/radio production

3.1 Differentiate major microphone designs
3.2 Describe directional characteristics
3.3 Identify and describe handheld and personal microphones
3.4 Position microphones
3.5 Describe types and uses of various microphones
3.6 Describe phase cancellation
3.7 Describe methods of creating the stereo effect
3.8 Describe digital audio
3.9 Describe analog audio
3.10 Identify and describe communications systems

Committee Identified Academic Skills
The technical committee has identified that the following academic skills are embedded in this contest.

Math Skills
- Demonstrate the ability to do basic calculations involving time.
- Demonstrate the ability to read and use a variety of clocks and stopwatches.

Science Skills
- Use knowledge of sound and technological applications of sound waves.

Language Arts Skills
- Demonstrate use of such verbal communication skills as word choice, pitch, feeling, tone and voice.
- Analyze mass media messages.
- Demonstrate comprehension of a variety of informational texts.
- Demonstrate persuasive writing.
- Demonstrate informational writing.
- Edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure and paragraphing.

Connections to National Standards
State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards
- Numbers and Operations.
- Problem-solving.
- Communication.
- Connections.
- Representation.

Source: NCTM Principles and Standards for School Mathematics. For more information, visit: http://www.nctm.org.

Science Standards
- Understands the sources and properties of energy.
- Understands the nature of scientific inquiry.

Source: McREL Compendium of National Science Standards. To view and search the compendium, visit: http://www2.mcrel.org/compendium/browse.asp.

Language Arts Standards
- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.readwritethink.org/standards/index.html.