OVERVIEW
Participants have the opportunity to use digital video skills, tools, and processes to communicate, entertain, inform, analyze, or illustrate the given year’s theme while simultaneously showcasing their skills with unmanned aerial systems. An extremely powerful and ubiquitous medium, video technology has great potential, strengths, and limitations that should be understood by all.

ELIGIBILITY
Three (3) teams per state may participate; an individual may participate solo in this team event.

TIME LIMITS
The video must not exceed three (3) minutes in length.
- If it is over three (3) minutes, a time violation of five (5) points will be assessed.
- Time starts with the first image or sound and continues until the last sound or image ends.

LEAP
A team LEAP Report is required for this event and must be submitted at event check-in (see LEAP Program).

ATTIRE
TSA competition attire is required for this event.

PROCEDURE
1. Participants check in their entries and submit a LEAP Report at the time and place stated in the conference program.
2. Entries are reviewed by judges. Neither students nor advisors are present at this time.

REGULATIONS
Videos:
- Must be submitted on a USB flash drive in MP4 format.
- Must not exceed three (3) minutes in length. If a video exceeds three (3) minutes, a time violation will be assessed.
- May be an individual or team project.
- All video footage must be the original work of the team, shot almost exclusively through the use of unmanned aerial system technology.
- All ideas, text, images, and sound from other sources must be properly cited.
- If copyrighted material is used, proper written permission must be included.
NOTE: The video production product will not be judged if copyright procedures are not followed.

Documentation materials (comprising “a portfolio”) are required and must be placed in a multi-page, single-file PDF on a USB drive, in this order:
- LEAP Report
- Title page with the event title, the title of the video, the conference city and state, and the year; one (1) page
- Table of contents; pages as needed
- Purpose and description of the video; one (1) page
- Team’s self-evaluation of the video, using criteria from the official rating form; one (1) page
- Hand sketched storyboard; pages as needed
- Digital video script; pages as needed
- List of hardware and software used in the development of the video; one (1) page
- List of references that includes sources for materials (copyrighted and non-copyrighted); pages as needed
- Permission letters for copyrighted material (including clips and images); pages as needed
- Completed and signed Student Copyright Checklist (see Forms Appendix or TSA website)
- Signed consent forms for all video participants (see Forms Appendix or TSA website)
- Plan of Work log that indicates preparation for the event, as noted by date, task, time involved, team member responsible, and comments (see Forms Appendix or TSA website); one (1) page
- USB flash drive should be submitted secured in the documentation portfolio. Within an envelope etc. so that it doesn’t fall out of the portfolio

EVALUATION
1. Evaluation will be based on the video footage and on the accompanying documentation.
2. Depending on the stated purpose, videos are judged on story concept, artistic and/or social value, audio and camera techniques, transitions, and pace, as well as technical attributes, creativity and organization, and the overall effect.
3. Portfolios must be complete, well-written, and professional in organization and appearance.
OVERVIEW
Participants have the opportunity to verbally communicate their knowledge of unmanned aerial system technology or TSA subjects. Participants give a three-to-five (3-5) minute speech fifteen (15) minutes after having drawn a card on an unmanned aerial system technology or TSA topic is written.

ELIGIBILITY
Three (3) individuals per state may participate.

TIME LIMITS
Each speech must be between three and five (3-5) minutes.
Participants will be penalized one (1) point per ten (10) seconds for speaking over five (5) minutes or under three (3) minutes.
Time commences when the speaker begins talking and concludes at the end of the speech.

LEAP
An individual LEAP Report is required for this event and must be submitted at event check-in (see LEAP Program).

ATTIRE
TSA competition attire is required for this event.

PROCEDURE
1. Participants report to the event area at the time and place stated in the conference program to sign up for a time and submit a LEAP Report.
2. At his/her assigned time, each participant draws three (3) cards, each containing one (1) topic, from a box and selects one (1) topic from the three (3) on which to speak. The cards with the unused topics are returned to the box.
3. Preparation
   a. After having selected a topic, the first participant enters a preparation room separate from the speech delivery room and is given fifteen (15) minutes to prepare a speech.
   b. Seven (7) minutes after the first participant enters the preparation room, the second participant enters the preparation room, goes to a different section, and begins his/her speech preparation, again with fifteen (15) minutes to prepare a speech.
   c. Each participant, in turn, is allowed to enter the preparation room at seven (7)-minute intervals, thus enabling a consistent flow of participants to speak before the judges in a timely fashion. (This allows for one [1] minute to enter the room and announce the entry number, up to five [5] minutes for the presentation, and one [1] minute to exit the room.)
4. The event coordinator introduces each participant (using the participant identification number only) according to the order in which participants appear on the sign-up/time sheet.
5. The timekeeper visually notifies the speaker of the time remaining by using six (6) separate cards. Each of the six (6) 5" x 7" notecards has a "time remaining in minutes" number on it (4, 3, 2, 1, ½, and 0), and each is shown in descending order to the participant by the timekeeper during the speech.
6. After speaking, the participant returns the topic card to the judges so that it can be returned to the topic box.
7. Judges independently evaluate each speech.

REGULATIONS
A. No reference is to be made concerning the name of the participant or his/her school.
   B. Each speech must be the result of the participant's own effort.
   C. Notes: No reference materials or devices may be used or brought to the preparation room.

Any notes for speaking must be written during the fifteen (15)-minute preparation period.
Each participant will be provided a maximum of three (3) 3" x 5" blank notecards.
Although participants are permitted to use notes when speaking, it should be noted that deductions in scoring could be made for this practice if the use of notes detracts from the effectiveness of the speech.
D. Observers: No observers are allowed in the event or preparation rooms during preliminary heats, although they are allowed to sit in the audience of the performance during the semifinal round.
No talking or gesturing is permitted.
Observers are NOT allowed to enter or leave during a speech.
There is no applause until the speech has concluded.
E. Participants are penalized by each judge one (1) point per ten (10) seconds for speaking over five (5) minutes or under three (3) minutes.

EVALUATION
1. The quality of the speech
2. The degree to which the content matches the selected topic
3. Adherence to the time limits
4. The LEAP requirements
Refer to the official rating form for more information.
OVERVIEW
Participants demonstrate their knowledge of TSA, concepts surrounding unmanned aerial systems technology, and FAA Part 107 Licensure Exam by completing a written, objective test.

ELIGIBILITY
One (1) team of three (3) members per chapter may participate.

TIME LIMITS
PRELIMINARY ROUND
1. One (1) hour is allowed for the written test.
2. This test is administered at the same time to all participants.

LEAP
A team LEAP Report is required for this event and must be submitted at event check-in (see LEAP Report).

ATTIRE
TSA competition attire is required for this event.

PROCEDURE
1. Participants report to the event area at the time and place stated in the conference program. Teams must submit a LEAP Report prior to taking the written test.
2. Participants follow the specific regulations and adhere to the directions provided onsite by the event coordinator.
3. Each team is assigned a number by the event coordinator.
4. All team members take the written exam.

REGULATIONS
A. Scan-type forms are furnished by the event coordinator.
B. Participants must provide their own pencils for the test.
C. Participant identification numbers (assigned during conference registration) must be entered on the scan form in the space indicated.
D. Participants must stop work immediately when time is called.
E. Should a participant complete the test before the time is allocated, the participant holds the test and remains seated quietly without distracting others. Failure to do so results in disqualification of the participant.
F. All tests must be turned in before leaving the test area.
G. The average of the scores of all three (3) team members determines team ranking.

EVALUATION
A. Preliminary round/written exam: Scores on a test of fifty (50) multiple choice questions.
B. The content and quality of the LEAP Report.

Refer to the official rating form for more information.
OVERVIEW
Participants have the opportunity to showcase their computer science and unmanned aerial system skills in this unique programming competition. Students have 5 minutes to map out the obstacle course with their team using measuring devices and graph paper. Then they will create a flight plan and program to bring back into the course to test for accuracy.

ELIGIBILITY
Three (3-4) individuals per team, 2 teams per school. ***This event is not national TSA eligible.

TIME LIMITS
Each team will have 5 minutes to measure and record items in the obstacle course. Participants will be penalized one (1) point per ten (10) seconds they go over the 5 minute time limit. Time commences when the timekeeper begins opens the door to allow the team in the room with the obstacle course, and concludes when time is called. Teams or participants who continue to stay in the room or record measurements will have points deducted.

LEAP
An individual LEAP Report is required for this event and must be submitted at event check-in (see LEAP Program).

ATTIRE
TSA competition attire is required for this event.

PROCEDURE
1. Participants report to the event area at the time and place stated in the conference program to sign up for a time and submit a LEAP Report, and have their obstacle course *tool box* checked for eligibility. **See next page for tool box contents.
2. At his/her assigned time, each team is allowed into the obstacle course room.
3. Participants work together in a team to use measuring devices to record measurements and make a usable flight plan to program their drone.
4. Teams then use recorded measurements and flight plan to create a program for their drone’s flight path.
5. Created flight plans will be turned in when it is that teams turn to test their created program.
6. Preparation
   a. After having gathered measurements, teams go to a different room for 30 minutes to create flight plan and program for drone.
   b. The timekeeper visually notifies the teams of the time remaining in 5 minute increments.
   c. When time is called for 30 minutes preparation time teams must stop working.
   d. Teams who continue to work after time is called will have 1 point deducted for every 10 seconds they continue to work.
7. After preparation, each team will be allowed 2 attempts at the obstacle course. The better score is the score that is kept.
8. Judges independently evaluate the flight plans and the report.

REGULATIONS
A. No reference is to be made concerning the names of the participants or their school.
B. Each flight must be the team’s own effort.
C. No reference materials or devices may be used or brought to the obstacle course room during measuring or creation of flight plan sketches. Only non-electronic/non-digital measuring devices are allowed.
D. Observers: No observers are allowed in the event or preparation rooms during preparation of flight plans and programming of drones, although they are allowed to sit in the audience of the performance during the flight runs at the end.
   No talking or gesturing is permitted. Observers are NOT allowed to enter or leave during a flight. There is no applause until the flight has concluded.
   **Note:** No cameras, cell phones, computers etc. will be allowed in the obstacle course at any time until accuracy flights begin to protect the integrity of the course. Any students caught discussing the course with other students prior to the accuracy flights will be disqualified from the event, or their school that is participating will be disqualified if they themselves are not the ones participating.

EVALUATION
1. The quality of the flight plan
2. The degree of accuracy of the flight
3. Adherence to the time limits
4. The LEAP requirements
Required Drone Obstacle Course “Tool Box” contents

Does not have to be contained in a tool box, can be stored in a Rubbermaid container, or any storage device that travels well and will keep all of the items in one location until needed.

(All items should be labeled with school name)

- 3-4 pairs of safety glasses (one for each participant on team)
- 3-4 non-electric/non-digital measuring devices
- Graph paper
- Writing utensils
- Clips boards
- Drone programming device with software loaded
- Small programmable drone (parrot mambo or small dji size)
- Drone repair kit (this is based on the school’s knowledge of the damage their drone might sustain)
- Chargers for programming devices and drones