

MISSION POSSIBLE (CONT.)

See General Rules, Eye Protection & other Policies on www.soinc.org as they apply to every event.

- b. Award 25 points for each of the following: (100 points maximum):
 - i. The ASLs are submitted on time at device impound.
 - ii. The ASLs use the format specified on www.soinc.org.
 - iii. The ASLs are 100% accurate of intended scorable and non-scorable actions.
 - iv. The scorable & non-scorable actions within the device are labeled as in the ASLs.
- c. Award 50 points for each of the following:
 - i. Participants use no more than 30 minutes to set up their device.
 - ii. The first time each action in **4.b.** is successfully completed as described.
- d. Award 100 points for completing the Start Action.
- e. Award 250 points for completing the Final Action if the battery is freestanding and untouched at the end of the run. If the battery tips on a side, but still remains on the platform, only award 150 points if all other requirements are met. If the battery falls off the platform, no Final Action points will be awarded.
- f. Award 2 points for each full second (rounded down) of operation up to the Target Operation Time.
- g. Award 1 point per full second that a non-electrical or non-spring timer runs before the Target Operation Time if all conditions are met and the next action is initiated by the timer.
- h. Award 0.1 point for each 0.1 cm that the device dimensions are under 60.0 cm in each axis. The maximum score awarded will be 90 points.
- i. Award 75 points for a device that has no touches.
- j. Teams receive only participation points for impounding a device but not competing, unsafe devices, or devices that are remotely timed/controlled.

6. PENALTIES:

- a. Deduct 1 point for each full second (rounded down) that the device operates past the Target Operation Time up to 180.0 seconds (whichever occurs first).
- b. Deduct 25 points:
 - i. for each dimension of the device that exceeds 60.0 cm, excluding the Final Action
 - ii. if the top and 2 vertical walls are not open or transparent
 - iii. for each touch/adjust up to 3 times. If the device stops after the third touch, it will not be allowed to be touched/adjusted and the time will be scored as 180.0 seconds.
- c. Deduct 50 points for the first solid or liquid that leaves the measured dimensions of the device, excluding 4.b.x. and the Final Action
- d. Deduct 150 points for each:
 - i. electrical or spring timing action in the device that takes longer than 10.0 seconds, except raising the Final Action platform
 - ii. action where electricity is used where it is not allowed. The action will also not count for points.
- e. Devices impounded after the deadline will be scored after devices impounded on time.

7. TIEBREAKERS:

- a. Ties are broken as follows:
 - i. Fewest penalty points
 - ii. Smallest overall dimension (L+D+H) of the device

<u>Recommended Resources</u>: The Science Olympiad Store (store.soinc.org) carries the Mission Possible Video Download and Problem Solving/Technology CD; other resources are on the event page at soinc.org.

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