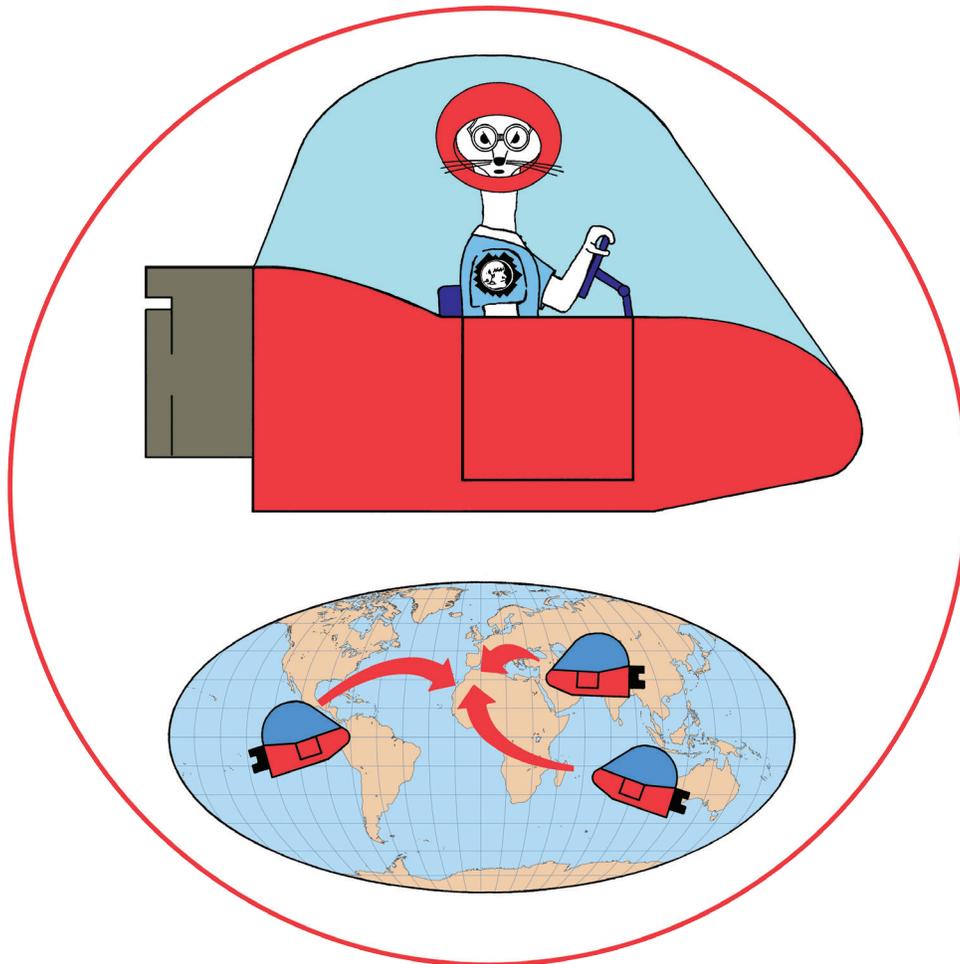




# Odyssey of the Mind

**Problem No. 1:**

## LONGSHOT SOLUTION



**Proud sponsor of Odyssey of the Mind**

# Longshot Solution

## Problem No. 1: Divisions I, II & III

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### Introduction

As we welcome ARM & HAMMER™ Baking Soda as an official sponsor of Odyssey of the Mind, it is important to learn some of the reasons for its support. Like OotM™, ARM & HAMMER™ believes people, especially young people, can do much more than others think they can. They proudly sponsor this problem about a group that is doubted and its warnings about a disastrous event are disregarded. The world has and will be improved and even “saved” by unexpected actions from unlikely individuals and this problem lets Odyssey of the Mind teams create and present their own story to inspire others to believe in the “longshots.”

### A. The Problem

A group of “Longshots” believe a disastrous event threatening the world is about to occur and must be stopped. Because no one takes them seriously, it is up to the Longshots to solve the problem. To succeed, they must send materials from all corners of the world using vehicles that overcome obstacles and travel simultaneously into a Reaction Area. As time counts down the Longshots will use the components, including ARM & HAMMER™ Baking Soda, to create a reaction that produces a very special effect that saves the day!

The **Creative Emphases** of the problem are on the way the vehicles function, the Longshot Characters, the Zero Hour timer, and the special effect.

The **Spirit of the Problem** is for the team to present a performance about Longshot characters who save the Earth from a disastrous event. Three team-created vehicles will travel and deliver materials, including ARM & HAMMER™ Baking Soda, to a Reaction Area. The materials are combined to create a reaction that is depicted as the Longshots saving the world. The vehicles will travel simultaneously from different Start Areas and overcome team-created obstacles on their way to the Reaction Area. Two or more characters will not believe in the Longshots, but realize they were wrong and throw them a celebration after the special effect occurs. There will also be a “zero hour” countdown.

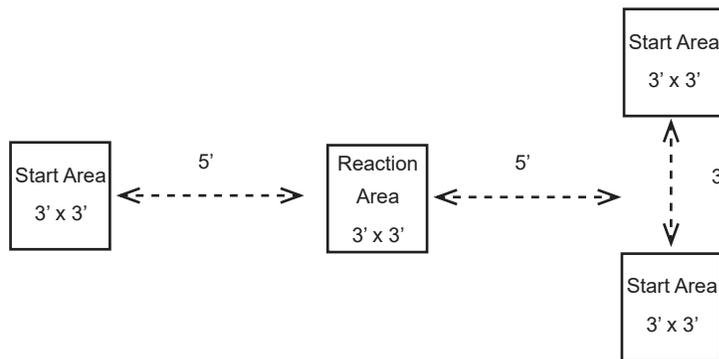
### B. Limitations *(Italicized words/terms are defined in the 2019-20 Odyssey of the Mind Program Guide or the Problem Glossary.)*

1. **General Rules:** Read the *2019-20 Odyssey of the Mind Program Guide*. This manual is updated each year and includes important rules for solving the Odyssey of the Mind problems and forms required for competition. This problem cannot be solved without referring to the Program Rules section of the guide.
2. **Problem Clarifications:** The *Odyssey of the Mind Program Guide* explains the types of questions that will be clarified and how to submit them. Problem clarifications can be submitted and accessed at [www.odysseyofthemind.com/clarifications](http://www.odysseyofthemind.com/clarifications). **The deadline for submission is February 15, 2020.** CCI may find it necessary to issue clarifications after that date, so continue to check for them after February 15 and before each competition.
3. The **time limit** for this problem is 8 minutes. This starts when the Timekeeper says, “Team Begin,” and includes setup, Style, and the presentation of the solution. Time ends when the team finishes or the Timekeeper says, “Time,” whichever comes first.
4. The **cost limit** for this problem is \$145 (U.S.). The combined value of all materials used during the presentation of the solution, including Style, cannot exceed this amount. The Odyssey of the Mind Program Guide explains the cost limit and lists items that are exempt from cost.
5. The team will create an original performance that includes:
  - a. Three team-made vehicles that travel on a course for score.
  - b. Team-created obstacles.
  - c. Longshot characters who save the world.
  - d. Two or more characters that do not believe the Longshots.
  - e. A reaction that produces a special effect.
  - f. A “zero hour” indicator.
  - g. A celebration for the Longshots.
  - h. five Style elements including two that are chosen by the team.

6. The three required vehicles:
  - a. must be original creations of the team. To be considered original, the way a vehicle travels and/or the way it is propelled must be a result of the team's ideas and work. Vehicles may include *commercially-produced* parts.
  - b. will travel using a power source and guidance that is contained on the vehicle. No external power sources such as ramps, external fans, or remote control may be used.
  - c. will be scored for the difference between them, such as their construction, method of travel and propulsion systems (type, application, origination, etc.). The team may use more than three vehicles, but only three will be eligible for score in D3 & 4.
  - d. must fit completely inside a 1' x 2' x 2' area, measured in any orientation, without cargo. Nothing may exceed these dimensions such as wires, cords, etc. **For example, this limitation prohibits AC power and remote control.**
  - e. must travel across the floor surface. They may lose contact with the floor when overcoming obstacles.
  - f. must travel independently of each other.
  - g. must be released simultaneously when attempting to score. This means that 2 or 3 vehicles traveling for score must be released at the same time, so they travel outside of the Start Area toward the Reaction Area. They do not have to travel the same length of time.
  - h. must look different from each other in shape or color or decoration.

7. Running the required vehicles:
  - a. They must each start inside of Start Areas (See Figure A.) and travel using their own power.
  - b. There is no limit to the total number of runs the vehicles may attempt. Each vehicle must complete at least one successful run to be eligible for score in D4. The three required vehicles must make a total of six successful runs for maximum score.
  - c. The team is required to run any two or all three vehicles at a time to receive score for D4.
  - d. All vehicles on the same run must be released and begin to travel simultaneously toward the Reaction Area to be eligible for score. They must be released at the same time from different Start Areas and travel to the Reaction Area. When a vehicle enters the Reaction Area, it may be unloaded and removed from the Area. If the other vehicle(s) that were traveling on that run do not enter the Reaction Area, they may be returned to a Start Area to be released again for score. No other runs can be attempted until all vehicles traveling on this attempt are successful. If the team wants to move on without all vehicles being successful, penalty E6 applies.
  - e. If a vehicle is not successful for any reason, on any run, it must be returned to the Start Area to begin again. Other successful vehicles on that run do not have to be returned and run again. There is no penalty if the vehicle is successful on another attempt.
  - f. The vehicles can be touched, adjusted, etc. any time they are not traveling between a Start Area and the Reaction Area. Once it breaks the plane of the Reaction Area, it is considered in the area and team members can touch the vehicle to move it, unload it, etc.
  - g. Each Start Area must be used at least one time for a successful attempt for score in D4a.

**Figure A: Site Setup**



*preferred audience seating*

8. The materials carried by the vehicles:
  - a. must be tangible items but can be called anything the team wishes.
  - b. can be anything the team wishes, but one component must be ARM & HAMMER™ Baking Soda. All materials delivered to the Reaction Area must be used as part of the reaction that causes a special effect. They may be part of the reaction, setup, etc.
  - c. are only required to be delivered during runs for score. Additional runs to the Reaction Area or anywhere else on the site do not require the vehicles to carry any materials, but they can if the team wishes.

9. The obstacles:
  - a. must be overcome by different vehicles. They only need to be overcome on one successful run and afterwards may be removed by the team.
  - b. will be created by the team. There will be two different obstacles. They can be anything the team wishes, but the vehicles must:
    - (1) Break through something tangible placed on the course.
    - (2) Travel completely over something a minimum of ½" above the floor when sitting on the course.
10. The Longshot Characters:
  - a. must be portrayed as original, human characters. They must not portray or represent recognizable imitations of a known character or person.
  - b. will try to convince others of a disastrous event that threatens the world. This can be anything the team wishes.
  - c. will take action to save the Earth from the disastrous event. These actions must be shown as taking place on Earth, however, the locations portrayed in the performance can be real or fictional.
11. Two or more characters that do not take the Longshots seriously:
  - a. can be anything the team wishes.
  - b. will not agree that the world is threatened and do not believe the Longshots.
  - c. will recognize that the Longshots were right and throw a celebration after the Longshots save the world from the disastrous event.
12. The "zero hour" indicator can be anything the team wishes, but it must be on display at some point in the performance. It must visually represent time counting down. The special effect reaction must take place before the clock counts down to zero in order to save the world.
13. The special effect:
  - a. will be portrayed in the performance as saving the world.
  - b. must be noticeable to the judges and audience.
  - c. will be produced by one or more Longshot Characters who use the materials in the Reaction Area to create a visible and/or audible reaction from the Reaction Area. This may include materials in addition to those delivered by the vehicles on successful runs.
  - d. must include ARM & HAMMER™ Baking Soda.
  - e. cannot cause damage to the floor, performance area, judges or audience, etc. as described in the Program Guide and must be *self-contained* or be able to be cleaned up without interfering with the competition schedule.
14. The celebration for the Longshots can be anything the team wishes. It must be given by the characters that did not believe them.
15. The team should present the Staging Area Judge with four copies of the Team's Required List Form found in the forms section of the Members Area at [www.odysseyofthemind.com/members](http://www.odysseyofthemind.com/members) or four copies of a list on one side of one or two sheets of 8 ½" x 11" or A4 paper. This list can be hand-printed or computer-generated. It is for reference only. The list must include:
  - a. the team's membership name and number, the problem and division.
  - b. a brief description of the three required vehicles, their construction and how they are propelled.
  - c. a brief description of how the vehicles look different from each other.
  - d. the order of the runs made by each vehicle- which vehicles will run at the same time for each attempt.
  - e. the materials being carried to the Reaction Area and the reaction that creates a special effect.
  - f. a brief description of the two obstacles and when in the performance the vehicles will overcome them for score.
  - g. a brief description of the characters that don't take the Longshots seriously.
  - h. the signal the team will use to indicate it has finished presenting its solution.

## C. Site, Setup and Competition

1. The competition area will be a minimum of 24' x 20' (7.3m x 6.1m) with three taped Start Areas and a taped Reaction Area. During check-in, a judge will direct the team to place the vehicles in a measuring area. They must each fit entirely within a 1' x 2' x 2' area. If they do not, the judge will give the team an opportunity to bring it into specification if time allows. The vehicles must be in the Staging Area before time begins. The team will also present their two obstacles for inspection by the judges.
2. A three-prong electrical outlet will be available. Teams should bring their own extension cords and adapters, if needed.
3. Team members must report to the competition site with all their props and paperwork at least 15 minutes before they are scheduled to compete.
4. At the end of the 8-minute competition period, the Timekeeper will call time and all activity must stop. The team may end before the 8 minutes, but it must signal the judges when it is finished.
5. Teams should bring cleaning supplies to clean up any mess. Should a team take an unreasonable amount of time to clean the site, or leave a mess, the judges will assess an Unsportsmanlike Conduct penalty. Others not on the team's roster can help the team clear the site and remove the team's props. The competition area must be left undamaged, and clean and dry for the next team.

## D. Scoring

1. Overall creativity of the performance ..... 1 to 15 points
2. Overall quality of the presentation ..... 1 to 15 points
3. The vehicles ..... 4 to 30 points
  - a. Creativity of the way they function (1 to 6 @3)..... 3 to 18 points
  - b. Overall difference in design, travel and propulsion ..... 1 to 12 points
4. Running the vehicles ..... 0 to 55 points
  - a. Each start area is used for at least one successful run ..... 0 or 5 points
  - b. Each vehicle completes a successful run ..... 0 or 10 points
  - c. Each successful run (5 points @ up to 6 runs)..... 0, 5, 10... to 30 points
  - d. The two obstacles are overcome one time using different vehicles on a successful run..... 0, 5, or 10 points
5. The Longshot Characters ..... 3 to 30 points
  - a. Creativity of their portrayal..... 1 to 15 points
  - b. Originality of the disastrous event they are trying to stop ..... 1 to 5 points
  - c. Creativity of how they solve the problem in the performance ..... 1 to 10 points
6. The characters that don't believe in the Longshots ..... 1 to 15 points
  - a. Indicate they do not believe the Longshots ..... 0 or 5 points
  - b. Effectiveness in the performance ..... 1 to 10 points
7. The "zero hour" timer ..... 1 to 10 points
  - a. Indicates when the disastrous event will occur..... 0 or 5 points
  - b. Originality of design ..... 1 to 5 points
8. The special effect ..... 1 to 20 points
  - a. Takes place and is noticeable to the judges and audience ..... 0 or 5 point
  - b. Is caused by a reaction between ARM & HAMMER™ Baking Soda and other materials in the Reaction Area..... 0 or 10 points
  - c. Creativity and unexpectedness (wow factor)..... 1 to 5 points
9. The celebration ..... 1 to 10 points
  - a. Is given by characters that did not believe the Longshots ..... 0 or 5 points
  - b. Originality..... 1 to 5 points

*Maximum possible: 200 points*

## E. Penalties *(Deducted from percentaged scores)*

1. Spirit of the Problem violation (each offense).....-1 to -100 points
2. Unsportsmanlike conduct (each offense).....-1 to -100 points
3. Incorrect or missing membership sign.....-1 to -15 points
4. Outside Assistance (each offense).....-1 to -25 points
5. Over cost limit.....-1 to -100 points
6. Aborted attempt for score.....- 5 points

*Teams that don't present a scored element of the problem will not receive a penalty; they will receive a zero score for that category.*

## F. Style *(Elaboration of the problem solution; use four copies of the Style Form from the Odyssey of the Mind Program Guide.)*

1. Creativity of one Longshot Character's costume..... 1 to 10 points
2. Visual impact of a vehicle..... 1 to 10 points
3. (Free choice of team) ..... 1 to 10 points
4. (Free choice of team) ..... 1 to 10 points
5. Overall effect of the four Style elements in the performance..... 1 to 10 points

*Maximum possible: 50 points*

## G. Tournament Director Will Provide

1. A 24' x 20' (7.3m x 6.1m) course (larger if possible) with three taped Start Areas, 3' x 3' each, a 3' x 3' Reaction Area, and a 1' x 2' x 2' measuring area.
2. A 3-prong electrical outlet.
3. A judging team and materials necessary to judge this problem.

*NOTE: Contact your local Tournament Director for site specifications, such as actual dimensions, floor surface, etc. Do not submit a clarification request for this information.*

## H. The Team Must Provide

1. Four copies of its Style Form, one Cost Form, one Outside Assistance Form, and all team-specific clarifications.
2. Four copies of the list described in B15 This list is to assist the judges. If the team fails to provide the list, there will be no penalty; however, it benefits the team to have the lists because without them the judges might miss a scored aspect of the performance.
3. Any necessary extension cords or outlet adapters.
4. Cleanup materials as needed.

Problem by Dr. C. Samuel Micklus and Samuel W. Micklus.

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