FALSE ALARM RELAY RACE

FITNESS AND NUTRITION

MISSION DESCRIPTION

To complete this mission, participants will get into teams of five crewmembers. This mission will test the crew's ability to accomplish a mentally difficult task while simultaneously performing a physically strenuous challenge. Crews will have to work together and communicate to turn off the false alarm.

To deactivate the false alarm, the teams need a password that they will have to solve through a word puzzle. Teams will play multiple games of tic-tac-toe against another team to obtain the letters of the password. Watch out — these games have physical challenges, and only the winning team receives a letter clue toward solving their password. When the tic-tac-toe games result in no winner, the teams continue to move the Xs and Os one at a time on the board until a team makes a line of Xs or Os.

MISSION PREPARATION

TIMELINE

Breakdown	Duration
Background	5 minutes
Educator's instructions/demonstration	5 minutes
Group activity	15–20 minutes
Wrap-up	5 minutes
Total	**30–35 minutes**

MATERIALS

- Tape
- Large letters that spell out a password. Each team will have a different password. (See recommendations below)
- Three Xs and three Os or other types of markers to designate two different teams

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Difficulty: EASY

Duration: 30–35 MINUTES

Materials: MODERATE

GOALS

Astronaut crews will work together to shut off a false alarm aboard the International Space Station. Crews need to use their mental acuity and physical endurance to reach this goal.

OBJECTIVES

By the end of the mission, participants will be able to:

- Evaluate their agility, coordination, and cardiovascular endurance
- Communicate effectively to accomplish a task
- Develop an understanding of why astronauts train for different emergency scenarios

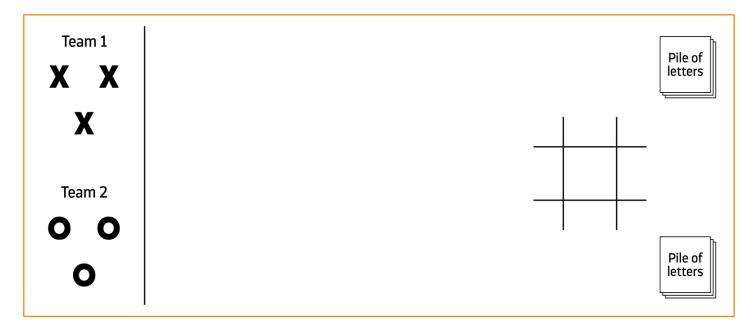Canadian Space Agency   Agence spatiale canadienne

Canada

BACKGROUND

Being able to handle an emergency is a key part of astronaut training. Astronauts will spend countless hours going over simulations of different emergency scenarios before they leave Earth. While an emergency aboard the International Space Station (ISS) is rare, part of an astronaut's job is to be prepared for any situation that may arise.

Teamwork is a key component of astronaut training. For example, in 2015, an alarm went off on the ISS due to a potential ammonia leak in the United States module. Astronauts reacted quickly and evacuated to a different module of the ISS. Checks and measurements confirmed that it was a false alarm. This was most likely due to a sensor problem that was then interpreted as an ammonia leak. Whether it is a false alarm or an actual emergency, astronauts need to be ready to respond at a moment's notice.

SET-UP

- Use a play space that is suitable for running.
- Create a large tic-tac-toe board (a pound sign or hashtag) at one end of the play space.
- Position two piles of letters for each team near the tic-tac-toe board.
- Give the crew their Xs and Os and position them at the other side of the play space.

LAYOUT

MISSION INSTRUCTIONS

1. One crewmember from each team will simultaneously race to the game board. Challenge participants by having them race by crab walk, bear walk, sideways shuffling or other types of physically strenuous movement.

2. Once the participants place their game piece, the crewmember races back to their crew and high fives the next participant.

3. Repeat steps 1 and 2 until all game pieces are placed and one team has three of their letters in a row.

   NOTE: Teams will only have 3 Xs and 3 Os (or similar markers), so it is not possible to fill the entire board.

4. If neither team has three letters in a row, crewmembers from opposing teams will continue to race. Participants will move the already placed Xs and Os one by one until one team has three letters in a row.

5. The winning crew may select a letter from their designated pile.

6. Reset and repeat.

7. When a crew has all their letters and has spelled out their password correctly, the false alarm is turned off.

VARIATIONS

Level 2

• Use more letters or create a phrase that the teams must solve.

SUGGESTED PASSWORDS

• Moon
• Star
• Mars
• Crew