

# 1990 Long-Term Problems

## **Geographic Odyssey 1989-1990**

Divisions II, III & IV

The team's problem is to design, build and drive a vehicle powered by the rowing motion of one or more team members while riding on it. The team will use the vehicle on a geographic expedition. For its expedition, the team will make observations of one or more aspects of three different existing countries. These aspects will be portrayed by the team. After making these observations, the team will run its vehicle in a flag-placement race. During this race, a team member(s) on the vehicle will place flags from different countries onto specific locations. Time limit: 11 min. Cost limit: \$75 USD.

## **Omitronic Humor 1989-1990**

Divisions I, II, III & IV

The team will develop and perform a comedy routine or a skit about a comedy routine. In addition the team will design, build and operate an original animated character that shows specific reactions and emotions. This Omitronic character will smile, shed tears, look surprised, look bored and show two reactions or emotions of the team's choosing. Time limit: 8 min. Cost limit: \$75 USD.

## **Classics . . . The Seven Wonders of the World 1989-1990**

Divisions I, II & III

The team's problem is to create and present a performance based on the seven wonders of the ancient world. The team must include the following in its performance:

- (1) Team-made replicas of six of the original seven ancient wonders that it recommends for reconstruction.
- (2) A model of the remaining lost ancient wonder that it recommends for reconstruction.
- (3) Replacements for the five lost wonders (excluding the pyramids and the one recommended for reconstruction).

These are a great undertaking by a group of people; an architectural or artistic achievement; something that had, has or could have a significant benefit to society; something apparently absurd with a logical reason for its selection; and a free choice of the team.

Time limit: 8 min. Cost limit: \$75 USD.

## **Structures In Harmony 1989-1990**

Divisions I, II & III

The team's problem is to design and construct prefabricated structure parts made of balsa wood and glue. These must be combined to make a single structure that will balance and support weight. Teams must assemble their prefabricated structure parts into one complete structure at the competition site. Teams may use straight pins for assembly. An important part of this problem is not only to design and construct a good structure, but to assemble it within a 15-minute period. Time limit: 8 min.

## **Recycle 1989-1990**

Divisions I & II

The team's problem is to develop a nonverbal communication system to guide blindfolded team members (collectors) through a course laden with trash and obstacles. One team member will be the dispatcher. Three blindfolded members will each pick up trash and take it to one of three transfer stations. The other blindfolded member, called the hauler, will collect the trash from the transfer stations and take it to the recycling center. Here, the hauler will attempt to empty the trash into the appropriate bins while blindfolded. The team must also place one container of "hazardous waste" in the hazardous waste site. Time limit: 8 min. Cost limit: \$75 USD.

## **Friends of Nature 1989-1990**

Primary