ROAD SCHOLAR

Read the General Rules in the manuals and on www.soinc.org as they apply to every event.

1. **DESCRIPTION**: Teams will answer interpretive questions that may use one or more state highway maps, USGS topographic maps, Internet-generated maps, a road atlas or satellite/aerial images.

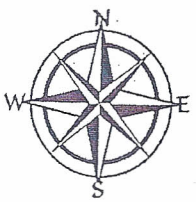
A TEAM OF UP TO: 2 **APPROXIMATE TIME**: 50 Minutes

2. **EVENT PARAMETERS:** Participants must bring a protractor, ruler, **pen/pencil** and may bring a USGS Map Symbol Sheet, a calculator, notes, reference materials, and other measuring devices. Computers are not permitted. The event supervisor will provide all required maps, question booklets, and response sheets. **Event Supervisors will check the accuracy of reproduced maps/map sections prior to competition.**

3. **THE COMPETITION**: The highway and quad**rangle** maps may be from one or more states. The event may be presented in a storyline format. Participants may be asked to draw map features located within a **square** section using the correct features listed in 3.c. This square will be included on the answer sheet. **Participants may be asked to draw a topographic map profile that will be included on the answer sheet.** Participants may not write on the maps.

a. **Topographic Map Testing Areas**

i. Map location/series/scale/index/legend
ii. Marginal information
iii. Contours
iv. Magnetic declination
v. Map symbols
vi. Map features
vii. Survey control marks (control stations and spot elevations)
viii. Azimuths and bearings
ix. *Stream gradient (feet per 1000 feet)



x. Distance values between features (both English and metric units)
xi. Geographic coordinate system features and symbols (degrees, minutes, seconds)
xii. Public Land Survey System (PLSS)
xiii. Elevation of features and symbols
xiv. *Slope (feet per 100 feet)
xv. Sector-Reference System
xvi. Direction of stream flow
xvii. *Profiles
xviii. Graticule tick marks
xix. *Universal Transversal Mercator (UTM)

b. **Highway Map Testing Areas**

i. Distances between features
ii. Map legend/tables/index
iii. Map grid system
iv. Map symbols
v. City/Regional inserts on the highway map

c. **Student-Created Map Design**

i. Map scales
ii. USGS topographic map symbol
iii. Distances
iv. Azimuths and bearings
v. Public Land Survey System

* Items marked with an asterisk should be written at an introductory level for regional events.

4. **SCORING**: Teams will be ranked according to their point total. Values of questions may be weighted. Ties will be broken by the accuracy and/or quality of answers to pre-selected questions.

Recommended Resources: All reference and training resources including the **Road Scholar/Map Reading Coaches Manual on CD (RDCD)** are available on the Official Science Olympiad Store or Website at http://www.soinc.org Also see USGS Science education: http://education.usgs.gov/ and USGS Topographic Maps: http://education.usgs.gov/common/secondary.htm#topographic