## OFFICIAL RULES FOR THE

## **?**<sup>1</sup>, TULSA ENGINEERING CHALLENGE

**ELECTRICAL MOTOR CONTEST** 

**OBJECTI E** 

Note: The on-line encyclopedia en.wickipedia.org is a good reference for electric motor theory and terminology. Descriptions of the Beakman and homopolar simple motors can be found on YouTube.com and other on-line sources through Google searches.

## MATERIAL SPECIFICATIONS

The motor must be fabricated from basic materials and not use parts from manufactured motors or kits. The power source must be a single cell battery with a volume not exceeding that of a conventional D size. The maximum nominal voltage shall not exceed four (4.0) Volts.

A design drawing clearly labeling each component and a corresponding parts list must accompany each motor. The parts list must indicate the source (vendor), cost, machining and fabrication procedure for each component.

time permits. Decision of judges, during all phases of competition, will be final. Judges will determine winning entries at the close of the competition. Winners need not be present.

## PRIZES

Prizes will be awarded for three divisions as follows: Upper Division (9<sup>th</sup> thru 12<sup>th</sup>), Middle Division (7<sup>th</sup> thru 8<sup>th</sup>), and Lower Division (6<sup>th</sup> grade and under). In the Lower Division prizes will be awarded for both the Category C and the all other Categories class. In the event of a tie, prizes will be equally distributed between winning entries.

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