

## Visiting Researcher Profile



### **Mr. Kevin M. Caruso**

Electrical Engineer, Space Author, Private Pilot  
Stankraft

Research Specialty: Instrumentation Control Panel Design

### **Bio**

Kevin Caruso is an electrical engineer, private pilot, and space author. He received his BSEE from the University of Illinois, and did graduate work in patent law at the Illinois Institute of Technology. As an engineer he designs electronic control panels for commercial instrumentation. In 1991, Kevin created a Young Pilot Program for 11-16 year old students who were eager to learn about flying. He has been sharing his passion for space exploration with students and teachers since 1994. At that time, NASA's field center in Cleveland Ohio selected him to share space science and Apollo Moon rocks with schools across Illinois. He was selected in 1999 to serve as a NASA JPL Solar System Ambassador in Illinois, and has been a guest presenter at Space Center Houston's Educator Conference for 5 consecutive years. After 4 years of research, his middle school book entitled *Back To The Moon* was published in 2001. Kevin enjoys sharing his passion for space with students, educators and parents. He lives in Illinois and is the proud father of two wonderful teenage children.

### **Examples of Classroom Presentations**

#### ***Space: Getting There, Living There, Coming Home* [Grades 4-12]**

Where does "space" begin? Learn how to get there, how living there is different from living on the ground, how some animals behave in space, and what's unique about coming home again. This very hands-on presentation involves indoor-safe rockets, the World's Cheapest Space Suit, microgravity demonstrator, and a Shuttle thermal protection tile heating demonstration.

#### ***The Power of Models!* [Grades: 4-12]**

What is a model? How are models useful? Pace off the distance between the Earth and Moon using a basketball and baseball. See what the Apollo Astronauts saw 2/3 of the way to the Moon. Grab your classroom globe and dig a hole through the center of the Earth to see where will you come out—IT'S

NOT CHINA! Measure the distance to the Sun using a paper towel tube, some foil and paper. Learn what would happen if you dropped an egg from a 100-mile high tower—would it fall or float? What's so special about the speed 17,500 mph? See how a Microgravity Simulator behaves in your classroom.

***Scale Model Solar System* [Grades: 4-12]**

Using a penny, see how large our universe really is. Where in the Universe do we live? Then learn about our Solar System and a bit about each planet. Build planetary markers, then go outside to a large football or soccer field and start pacing off the distances to the planets. Your field probably won't be big enough---even with the demotion of dwarf planet Pluto! Discover how SLOW the SPEED OF LIGHT really is!

***Let's Make A Comet!* [Grades: 4-8]**

What are comets? Make your own icy-cold dirty comet. Build several model comets and see which ones best fit the evidence. See some comets up close as seen by the Stardust and Deep Impact spacecraft. (Requirement: dry ice and a bag of dirt.)