

**U.S. House of Representatives
Committee on Science, Space, and Technology**

HEARING CHARTER

*Threats from Space, Part II:
A Review of Private Sector Efforts
to Track and Mitigate Asteroids and Meteors*

Wednesday, April 10, 2013
2:00p.m. – 4:00 p.m.
2318 Rayburn House Office Building

Purpose

At 2:00 p.m. on April 10, 2013, the Committee on Science, Space, and Technology will hold a hearing titled *Threats from Space, Part II: A Review of Private Sector Efforts to Track and Mitigate Asteroids and Meteors*. This is the second hearing this Congress where the Committee examines the tracking, characterization and mitigation of Near Earth Objects. The hearing will focus on the most viable near-term initiatives within the private sector and the international coordination needed to identify and characterize potentially hazardous near Earth objects.

Witnesses:

- **Dr. Ed Lu**, Chairman & CEO, B612 Foundation
- **Dr. Donald K. Yeomans**, Manager, Near-Earth Objects Program Office, Jet Propulsion Laboratory
- **Dr. Michael F. A’Hearn**, Vice-Chair, Committee to Review Near-Earth Object Surveys and Hazard Mitigation Strategies, National Research Council

Overview

On Friday, February 15, 2013, two events occurred that received worldwide attention. An unforeseen meteor (estimated 50 feet in diameter) exploded in the sky above the Russian city of Chelyabinsk releasing the equivalent of a 300 kiloton bomb, about twenty times the explosive energy of the atomic blast used over the city of Hiroshima. This blast injured nearly 1,200 people and resulted in an estimated \$33 million in property damage. On the same day, a small asteroid (150 feet in diameter) discovered by amateur astronomers and tracked closely by NASA passed safely by the Earth, but within the orbital belt of geostationary satellites. Until it entered our atmosphere, the Russian meteor went completely undetected. According to NASA, the two

events were unrelated, but raised public awareness of the potential threat from Near Earth Objects (NEOs).

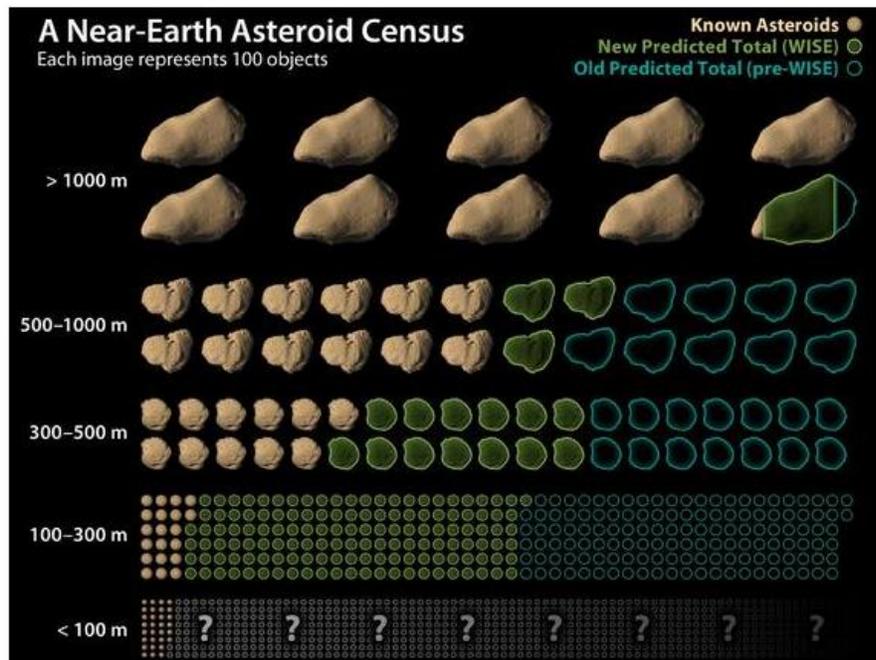
On March 19, 2013, the Committee on Science, Space, and Technology held a hearing titled “Threats from Space: A Review of U.S. Government Efforts to Track and Mitigate Asteroid and Meteors.” That hearing addressed the U.S. government’s plans and programs to identify, catalog, and coordinate the threat of NEOs.

This hearing will look beyond just the U.S. Government to hear about public-private partnership, commercial private sector, and philanthropic initiatives to survey the sky for asteroids and comets.

Some of the overarching questions:

- Do we have the tools and technology necessary to detect and track Near Earth Objects?
- What are the most viable efforts to focus on in the next 5 to 7 years that will yield the most progress in identifying and cataloging the NEO threat?
- Are we tracking the right size objects, specifically the ones that can cause significant harm?
- Once we identify an object, what are our means of tracking it?
- What are our contingencies and mitigation capabilities if we determine there is a threat from a NEO impact?

The Science, Space, and Technology Committee has been on the forefront of the issues surrounding Near Earth Objects. For example, the NASA Authorization Acts of 2000 and 2005 directed NASA to conduct a survey of the population of NEOs and study mitigation plans. NASA estimates 20,000 potentially hazardous asteroids orbit within the vicinity of the Earth.



NASA NEO Asteroid Size Model

Credit: NASA/JPL-Caltech