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# AEROSPACE

A M E R I C A

**Budget battles,  
test flights,  
lawsuits...**

# 2013 IN REVIEW

**PREMINENCE AT RISK**  
AIAA President-Elect Jim Albaugh  
on the industry's future, **page B5**



## A year of reminders

by Annie Wargetz

*The Society and Aerospace Technology Technical Committee promotes the transfer and use of aerospace technology for the benefit of society.*



*A meteor streaks through the sky over Chelyabinsk, Russia, in this frame grab from a dashboard camera. Credit: AP.*

From meteors to air crashes to privacy incursions, events in 2013 drew the public's attention to aerospace science and technology. On the morning of February 15, a **meteor** entered Earth's atmosphere, creating a bright flash and vapor trail over Chelyabinsk, Russia. The resulting shock wave broke windows and damaged buildings for hundreds of miles, sending 1,500 people to hospitals.

A host of dashboard cameras, cell phones, and other devices captured the meteor's fiery entry. More than 100,000 of these videos can be found online—the most popular has been viewed 39 million times.

On the same day as the Chelyabinsk blast, Earth had another close call: the flyby of an **asteroid** nearly half the size of a football field. The approach of the object, called 2012 DA14, was the closest ever recorded for a natural body that large.

The two events, declared a “wake-up call” by members of Congress, were a reminder of how vulnerable the Earth is to dangers from space. The House of Representatives held **hearings** to discuss defensive strategies.

Two **accidents** also shook the aerospace community. A Russian Proton rocket launch failed on July 2, causing a catastrophic explosion. Videos of the event reached viral status on the Internet, reminding the public that spaceflight still carries

great risk. The failure also heightened concerns about delivering crews and cargo to the International Space Station safely and on time.

Four days later, a commercial airliner crashed. Asiana Flight 214 collided with a sea wall on final approach to San Francisco International Airport. The accident killed three and underscored the need to guard against complacency in ensuring flight safety.

**Unmanned aircraft**, meanwhile, offer growing benefits to society in areas such as disaster monitoring and law enforcement. Versions of the Global Hawk track hurricanes; other types are used for predicting and chasing tornados. The advance warnings these aircraft provide save many lives each year. States have begun competing for a stake in test facilities for the planes. At the same time, there is increasing concern that they could be used by the government to spy on U.S. citizens. Congress has petitioned the FAA to create rules for the use of these aircraft, and a growing number of states are proposing bills addressing privacy issues.

Much farther away, on July 19, **Cassini** captured an image of Earth from Saturn, only the third ever taken from the outer solar system. The picture drew enormous attention on the Internet, reminding viewers of their planet's place in the universe. ♀