

Rocket ignition, thundering sound, billowing smoke, shaking ground →Liftoff!

by Ken Kozy



The Launch of the OSIRIS-REx Spacecraft. Picture credit: NASA, Dante Lauretta (@DSLauretta) | Twitter <https://twitter.com/DSLauretta>

The [suddenness and wonder of the sights and sounds](#) poured over all of us! Thousands of world visitors watched the September 8th launch of the NASA spacecraft for the [Asteroid Sample Return Mission](#) at Cape Canaveral AFB, Florida.

We were just 2.3 miles from the launch pad and 50 feet above ground as the blastoff of the huge Atlas V rocket impacted our senses and our emotions.

“God’s speed,” was my verbal prayer – but my voice was drowned out by the rockets’ sound and by everyone shouting their joy and exuberantly applauding this liftoff!

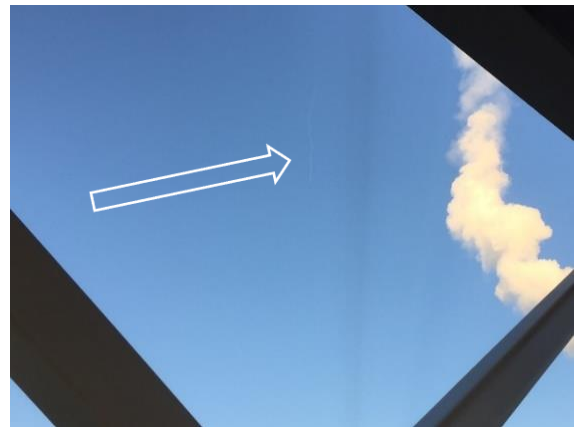
I tried to keep my left eye on my iPhone’s screen recording the launch while focusing my right eye on the physical sight of the liftoff. What a difference – I couldn’t believe it. In my right eye the reality was not at all like the launch videos and films I had seen before in theatres or TV!

First of all, the huge clouds of smoke emanating from the bottom of the rockets were immediately shunted away from the launch pad by large underground tunnels. Next, the flames from the rockets were not yellow, red, white or blue ...

instead they were a bright, hot stainless steel color! The 15-story tall spacecraft seemed to hesitate a few seconds before majestically lifting with such power – proudly, straight as an arrow into the sky, shining in the sunlight just before sundown. There was no smell of fuel or smoke. Over 750,000 pounds were lifted into space!

We all kept sight of the ascent until the ceiling of our open-air platform cut off the view. As I turned to run to the railing on the other side, I saw Mary, my wife, in back of me smiling, while her guide dog was wagging its tail – both were loving the experience.

From the side railing I discerned the continuation of the spacecraft’s vapor trail streaming high into the sky. Suddenly, the white vapor trail began to bend horizontally and stopped. But my right eye continued to see the distant, tiny, now red and yellow flames from its rockets – the spacecraft was beginning its planned angular orbit.



Center of photo: Launched Spacecraft shown at tip of white arrow at head of thin white vapor trail leaving Earth to go into solar orbit to catch up with asteroid Bennu. Photo Credit: Ken Kozy, Sept. 8, 2016.

What a beautiful sight! This is the culmination of over 10 years of intensive work, cooperation and interest by thousands of people from all over the world – the first [unmanned US spacecraft sent to intensely study and sample a Near Earth Object Asteroid](#). The science we learn should help us to remove such objects from a collision course with Earth. Its instruments will measure every square inch of that asteroid and send us the results.



NASA artist conception of OSIRIS-REx approaching asteroid Bennu to acquire sample of surface. Photo Credit: NASA

In 4 years the spacecraft will acquire a sample of this 4.5 billion years old asteroid now called [Bennu](#). This will be accomplished with a gentle touch, but not landing on it. After leaving for home, it will release its capsule containing the pristine sample back to Earth in 2023 for detailed scientific study. The sample may indicate the origins of our solar system, and water and life on Earth. Then, the spacecraft will orbit the Sun for thousands of years, perhaps until some future generation captures it, analyzes it, and reads the contents of its electronic memory.

One of those data banks is a memory stick of the artwork submitted by over 7,000 people from around our Earth. That includes my [eBook \(a Christmas Nativity story](#) – computer translated into seven languages), artwork photos, Seven-Dimensional eCommunication Concepts, and a prayer for success of the Mission and NASA. After the press conference, Richard Kuhns, Lockheed Martin OSIRIS-REx Program Manager, assured me that all submissions are present on the spacecraft. In its final phase, this Asteroid Sample Return Spacecraft will become a “time capsule” of our current culture for future descendants to explore and understand.

The press conference right after the launch was jubilant. Ellen Stofan, NASA Chief Scientist, told us “Every day at NASA we are turning science fiction into science facts, and that’s what we did tonight.” Dante Lauretta, OSIRIS-REx Principal Investigator, joyfully exclaimed “You all will be

glad to know we got everything just exactly perfect.”

Now after weeks of travel, [NASA reports](#) that this two-ton spacecraft continues on course and all tested systems are working as planned. The sweet taste of success – NASA did it, the world’s scientists did it, we did it, you did it, our government did it, and we USA taxpayers did it (\$800 million budget)!



Minutes before Launch, Mary & Ken Kozy with the Spacecraft centered between them on its Launch Pad in background on horizon, just to right of the trees. Photo Credit: Ken Kozy, September 8, 2016, 7pm.

I still say, this launch was a miracle. In the previous week, a SpaceX rocket and its satellite for Facebook completely blew up on a launch pad just one mile away. Then the week after, the launch of an Atlas V spacecraft was scrubbed due to a fuel leak in California – not rescheduled for weeks. [Thank God](#), our important Mission is safely on its round-trip journey of 4.4 billion miles to reach a speed of over 61,000 mph. The name of this spacecraft, [OSIRIS-REx](#), is short for: Origins, Spectral Interpretation, Resource Identification, Security – Regolith Explorer.

Afterwards, Mary and I celebrated by going to the Epcot® International Food and Wine Festival at Disney World in Orlando Florida!

To view video and to hear and enjoy the launch, to see exciting updates, and to learn more about this vital NASA Mission, go to this free internet link on a computer or smartphone: www.KenKozy.com - then click the tab “**eBook NASA Launch**” > [CLICK HERE](#) Also, click tab “[eBook READ on-Line](#)” for the **free** eBook.