



T E X A S ☆ T I M E S

John Cornyn

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## Texans and Wide Spaces

By U.S. Sen. John Cornyn

One of man's greatest achievements occurred 37 years ago this month. On July 20, 1969, two American astronauts guided their landing craft to the moon's surface. Neil Armstrong's historic radio transmission on that first lunar visit began simply with the words, "Houston, Tranquility Base here. The Eagle has landed."

Since that time, America's space exploration program – not yet even 50 years old – has enjoyed astounding success. It has also experienced a handful of breathtaking tragedies. Through it all, our country has remained steadfastly committed to the exploration of space: an enormous expanse of unvisited territory, our final frontier.

It's entirely fitting that Texas, with its pioneering spirit and frontier traditions, helps lead our country in these endeavors. We take pride that our astronauts train in Houston at the Johnson Space Center, and that every space mission is commanded from "Space City."

A good number of U.S. astronauts have been Texas natives: Navy Capt. Alan Bean of Wheeler was the lunar module pilot on the Apollo 12 mission, man's second lunar landing. The late Navy Capt. Edgar Mitchell of Hereford walked on the moon in January, 1971, on the Apollo 14 mission. Kenneth Cockrell of Austin, John Blaha of San Antonio and Robert Crippen of Beaumont each completed five shuttle missions. Dr. Bernard Harris of San Antonio, Elliot See, Jr. of Dallas and David Scott of San Antonio have also made history in space.

And some of the American space program's fallen heroes were native Texans, such as the late Col. Rick Husband and the late Lt. Col. Ed White II.

Husband, an Amarillo native, was crew commander of the 2003 Space Shuttle Columbia, which exploded over his home state during re-entry into the earth's atmosphere, just 16 minutes before its scheduled landing.

White, born in San Antonio, was the first man to walk in space. He died in 1967 in the Apollo spacecraft flash-fire during a launch-pad test at Kennedy Space Center, Florida.

Exploration – surmounting any barriers to greater understanding of our world – always involves risk. Space exploration is no exception: there will always be the potential for physical danger. We Americans owe a great debt of gratitude to those who have sacrificed their lives in these pioneering pursuits.

Space exploration is our destiny. Man is born with a natural desire to explore and solve the puzzles before him. We will eventually navigate our entire universe, and go beyond it. The only questions are when, and how.

Our National Aeronautic and Space Administration (NASA) programs are indeed expensive. But the hard science the programs produce are key to our country's engineering and technological research – work that keeps the U.S. at the leading edge of the world's technology.

Many commercial applications already have been harvested from space research. As former NASA official Michael Lembeck recently noted: "It's about far more than Teflon, Velcro and Tang."

One small example: A computer chip originally designed for the Hubble Telescope is now used in a digital imaging device that screens for cancer. The camera within can detect the difference between a malignant or a benign tumor – no invasive surgery is necessary.

Many other medical advances have been brought to us thanks to space technology, including the cochlear implant, an electronic device that can select speech signal information and send electrical pulses to the ear. This technology can actually reverse severe hearing loss.

What's more, the ultimate commercialization may come in the form of space tourism. Last year, American Mike Melvill became the first person to reach space aboard a privately funded, winged spacecraft known as "SpaceShipOne." Melvill's space plane was developed without government funding. This achievement may well hold for the future of flight the same promise as the Wright Brothers' feat at Kitty Hawk.

In centuries to come, when space travel is commonplace and America has tapped the resources of other planets, these first years of our space program will be remembered as the most significant.

With Rep. John Culberson of Houston, I've sponsored legislation to commemorate our first 50 years in space. Our bill would direct the U.S. Mint to create a \$50 gold coin with an image of the sun, and nine \$1 silver coins, each representing a planet in our solar system. Some proceeds would assist a need-based fund for surviving family members of the NASA personnel who died while performing their official duties.

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Texas once appeared to our forefathers as vast as space appears to us. Texas was founded by courageous men and women who braved the unknown – despite the hardship and danger lining their trails. So Texans have always shared a particular empathy for our pioneers and explorers.

To the seven Discovery shuttle astronauts flying above me tonight: I salute you. You are all Texans in spirit.

Our greatest discoveries are yet to come.

*Sen. Cornyn is a member of the following Senate Committees: Armed Services, Judiciary, Budget, Small Business and Entrepreneurship, and Joint Economic. He is the chairman of the subcommittees on Immigration, Border Security and Citizenship and Emerging Threats and Capabilities. Cornyn served previously as Texas Attorney General, Texas Supreme Court Justice and Bexar County District Judge.*

For Sen. Cornyn's previous Texas Times columns: [www.cornyn.senate.gov/column](http://www.cornyn.senate.gov/column)