



SPHERE

Teaching Civic
Culture Together

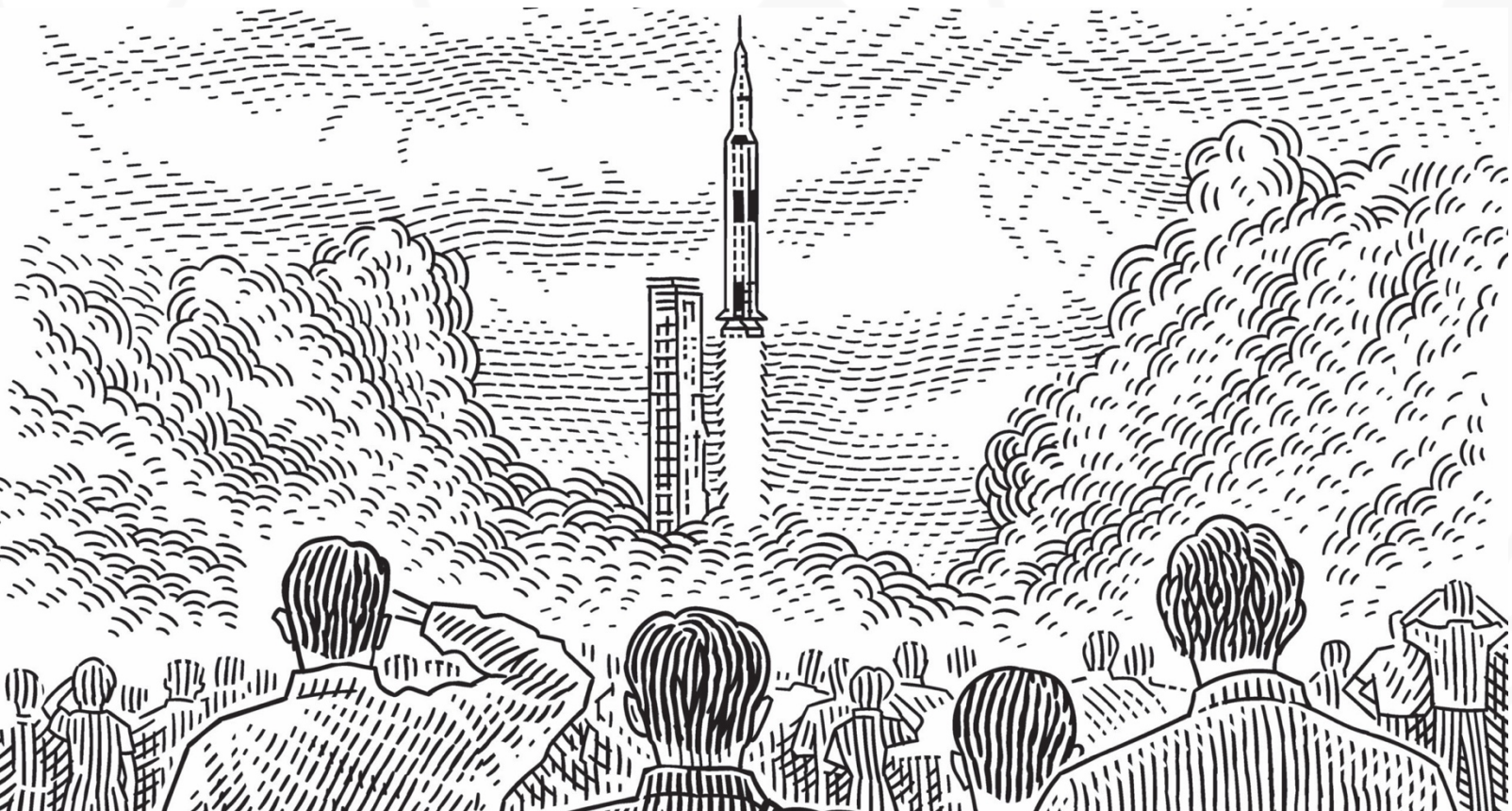
Centers of Progress, Pt. 39: Houston (Spaceflight)

Lesson Overview

Featured article: "Centers of Progress, Pt. 39: Houston (Spaceflight)" by Chelsea Follett

In this article, Chelsea Follett writes, "From liftoff onward, the American astronauts who shattered records and tested the limits of the possible relied on Houston to ensure mission success and bring them safely home. Many people still consider the moon landing to be among the greatest achievements of humanity. It was certainly the greatest feat of exploration in history."

In this lesson, students will learn how Houston became the center of human space exploration and one of the most economically dynamic cities of the 21st century.



HumanProgress

© 2023 Cato Institute

Warm-Up

Rocket launches and space missions have become routine in the 21st century. Private space companies now send up several rockets to space per week. NASA pushed an [asteroid off course](#) and has installed a [space-based telescope](#) a million miles from Earth. These days, a liftoff may only make the news if it fails.

But in the early days of space exploration, hundreds of millions of people would tune in to these events. When the first astronauts landed on the moon in 1969, over 600 million people watched. The moon landing was the most-viewed event in television history.

People at the time saw the moon mission as a momentous achievement. What do you think?

Watch this recap of the [Apollo 11 launch](#) and subsequent moonwalk. After watching the video, take a stand on the proposition, "Putting a person on the moon is the greatest achievement in world history." Do you agree or disagree? Why or why not?

Write a short paragraph in response to the proposition. Back up your claim with evidence from your background knowledge. With a partner, share your paragraph and ask for their feedback. Share your answers with the entire class.

Remember civil discourse. Give others a chance to speak. Be curious and patient. Listen actively. Disagree respectfully.

Questions for Reading, Writing, and Discussion

[Read the article](#), and then answer the following questions:

- Think about the historical context of Houston during the Cold War. How did the Cold War affect the Space Race between the United States and the USSR?
- According to the article, 20 percent of Houstonians [are immigrants](#) (compared with 13.6 percent nationally). How do you think immigration during the late 20th and early 21st centuries has affected Houston? Write at least one effect of immigration on Houston for each category below.

	Effects of Immigration on Houston	
Society		
Politics		
Environment		
Culture		
Economy		
Technology		

- Houston does not have zoning rules. What have been the impacts of the lack of regulation on Houston's growth?
- What environmental factors helped Houston develop as a significant economic hub in the late 1800s and early 1900s?
- What has been Houston's role in the oil and shipping industries in the 20th century?
- Why did NASA choose Houston as its center of human spaceflight operations?
- What were some of the characteristics of the flight controllers who quietly guided the early phases of America's space program?
- What was a significant difference between how the United States and the Soviet Union space programs handled publicity of their accidents during the Space Race? What about their respective social and governmental systems might these differences represent?
- What happened on Apollo 13? In three to five sentences, describe the events that culminated in the successful return of all three astronauts on that ill-fated mission.
- In your opinion, what has been the most notable legacy of the space program for Houston?

Extension Activity/Homework

Describe a SpaceX Mission

The Apollo 11 astronauts landed on the moon and returned safely to Earth in 1969. How did NASA engineers make this happen?

Watch this [video from Vox](#). Pay attention to the creator's detailed descriptions of how the various components of the mission worked.

The private company SpaceX sends both crewed and uncrewed missions into space and livestreams most operations. Choose a recent launch video from SpaceX and create a Google Slides presentation about it using the Vox video as a model. Provide a detailed explanation of the mission, including its purpose, launch, payload, recovery, and cultural and societal impact.

Your presentation should have 5–10 slides and include text, images, graphics, and videos. You must cite all sources with links to a works-cited slide.

One launch video you may want to profile is the first [Falcon Heavy launch](#) on February 6, 2018. On this mission, SpaceX sent Elon Musk's red Tesla Roadster into orbit around the sun and recovered two rocket boosters. There are many other spectacular launch videos to choose from on YouTube. Pick one that you find particularly compelling.