

The success of the United States space exploration program in the 20th century augurs well for its continued leadership in the 21st century. This success is largely attributable to the remarkable and indispensable partnership between the National Aeronautics and Space Administration and its 10 space and research centers. One of these important research centers is located in my home city of Houston. The Johnson Space Center, which manages the development, testing, production, and delivery of all United States human spacecraft and all human spacecraft-related functions, is one of the crown jewels of NASA and a lodestar Houston area. The other nine research and space centers are:

1. The Ames Research Center in California's Silicon Valley provides products, technologies, and services that enable NASA missions and expand human knowledge in areas as diverse as small spacecraft and supercomputers, science missions and payloads, thermal protection systems and information technology.

2. The Dryden Flight Research Center, the leading center for innovative flight research.

3. The Glenn Research Center, which develops power, propulsion, and communication technologies for space flight systems and aeronautics research.

4. The Goddard Space Flight Center, which specializes in research to expand knowledge on the Earth and its environment, the solar system, and the universe through observations from space.

5. The Jet Propulsion Laboratory, the leading center for robotic exploration of the Solar System.

6. The Kennedy Space Center, the gateway to the Universe and world leader in preparing and launching missions around the Earth and beyond.

7. The Langley Research Center, which continues to forge new frontiers in aviation and space research for aerospace, atmospheric sciences, and technology commercialization to improve the way the world lives.

8. The Marshall Space Flight Center, a world leader in developing space transportation and propulsion systems, engineers the future to accelerate exploration and scientific discovery.

9. The Stennis Space Center, which is responsible for rocket propulsion testing and for partnering with industry to develop and implement remote sensing technology.

NASA's stunning achievements over the last 50 years have been won for all mankind at great cost and sacrifice. In the quest to explore the universe, many NASA employees have lost their lives, including the crews of *Apollo 6*, the space shuttle *Challenger*, and the space shuttle *Columbia*.

Mr. Speaker, in the centuries to come, when space travel will be commonplace and America will have successfully led the way for humanity to colonize and utilize the resources of other planets, these first 50 years of NASA's existence will be remembered as the most significant era of human space exploration. It is, therefore, important that we commemorate the great achievements of NASA's first 50 years. I strongly urge my colleagues to join me in supporting this historic legislation.

Mr. UDALL of Colorado. Mr. Speaker, I rise today in strong support of this bipartisan concurrent resolution.

Human existence has marched through a great many generations, yet only in this last half century have humans taken to space.

We have been transformed by the space program. We live our lives differently, with long-range weather forecasts and GPS positioning and international cell phone calls and international banking.

We think of ourselves differently. Our space exploration has uncovered information about the universe that surrounds us. We now can conjecture about the first seconds of the life of the universe. We have learned much about where we are, and about what is happening around us, and about existence itself.

We think of our own planet differently. The sight of this fragile, blue ball, seen from a distance in dark space, stirred us, and provided impetus for the fledgling environmental movement. We realized that we had to sustain "Spaceship Earth."

As the chairman of the Science and Technology Committee's Subcommittee on Space and Aeronautics, I observe the unique role that NASA plays in our technology capabilities.

The aerospace industry is one of America's biggest successes, and one of the strongest contributors to our trade balance. It owes much to NASA's fundamental aeronautics research.

Harder to quantify, but just as important, NASA's incredible achievements in space inspire young people to choose careers in technology fields. NASA recognizes this and has developed fine educational initiatives.

We have many competing societal priorities that must be addressed, but it is vital that we invest in the future, too. Throughout human history, the winner has been the nation that was more technically powerful. Investing in science and technology, with the space program and STEM education, is an investment for a richer and wider future.

If we aren't willing to make the investments to lead technologically, we know that others will take that lead. That isn't the future that I would like to see. Do we want a world in which our smart people are drawn to the work done in other countries, leaving us on the periphery?

There are widespread reports that China and India are building significant R&D capacity by investing in research at universities, and are elevating their industrial policies towards higher end work.

We have been warned. The National Academies' "Rising Above the Gathering Storm" laid it out. The investments that earlier generations made brought us our prosperous and secure lifestyle. Now it is time for us to renew these investments.

I am pleased with the American COMPETES Act that Congress and the White House enacted. It boosts STEM education to prepare the next generation for the technological challenges of the future and it strengthens our country's research and innovation environment to keep America competitive in the global economy.

Today when we look back over the 50 years of the space age, we feel proud. And I am proud to be a cosponsor of this resolution. It tells a success story. Now it is our job to write another success story, by continuing to invest in the fundamentals of a strong technology sector: STEM education, space exploration, and technology research.

Mr. LAMPSON. Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by

the gentleman from Texas (Mr. LAMPSON) that the House suspend the rules and agree to the concurrent resolution, H. Con. Res. 225.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the concurrent resolution was agreed to.

A motion to reconsider was laid on the table.

#### HONORING THE 60TH ANNIVERSARY OF THE AERONAUTICS RESEARCH ACCOMPLISHMENTS EMBODIED IN "THE BREAKING OF THE SOUND BARRIER"

Mr. LAMPSON. Mr. Speaker, I move to suspend the rules and agree to the resolution (H. Res. 736) honoring the 60th anniversary of the aeronautics research accomplishments embodied in "the breaking of the sound barrier".

The Clerk read the title of the resolution.

The text of the resolution is as follows:

##### H. RES. 736

Whereas the National Advisory Committee for Aeronautics (NACA), and its successor agency, the National Aeronautics and Space Administration (NASA), developed and sustained the world's preeminent aeronautics research program after NACA's formation in 1915;

Whereas the speed of sound once presented a seemingly impenetrable and dangerous barrier to piloted flight;

Whereas NACA, the U.S. Air Force, and Bell Aircraft undertook a joint project to develop and test the X-1 aircraft and achieve piloted supersonic flight;

Whereas on the morning of October 14, 1947, an X-1 aircraft piloted by Captain Charles "Chuck" Yeager was dropped from a B-52 carrier aircraft and "broke the sound barrier" and achieved supersonic flight for the first time in history;

Whereas this flight provided proof of the feasibility of piloted supersonic flight, and delivered the data required to improve high speed performance and develop technologies for advanced supersonic aircraft; and

Whereas subsequent X-plane aeronautics research projects have built on the historic accomplishments of the X-1 aircraft and achieved advances in a wide range of aeronautics research areas: Now, therefore, be it

*Resolved*, That the House of Representatives—

(1) recognizes and honors the contributions of the scientists and engineers of NACA and its partners who pioneered the technologies to enable supersonic flight;

(2) recognizes and honors the bravery of Charles Yeager, and the bravery of the many other test pilots who, sometimes at the cost of their lives, enabled the aeronautics developments that made that first supersonic flight possible; and

(3) recognizes the importance of strong and robust aeronautics research activities to the well being of America.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Texas (Mr. LAMPSON) and the gentleman from Florida (Mr. FEENEY) each will control 20 minutes.

The Chair recognizes the gentleman from Texas.

##### GENERAL LEAVE

Mr. LAMPSON. Mr. Speaker, I ask unanimous consent that all Members

may have 5 legislative days to revise and extend their remarks and to include extraneous material on H. Res. 736, the resolution now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. LAMPSON. Mr. Speaker, I yield myself such time as I may consume.

I stand in strong support of this resolution honoring the 60th anniversary of the breaking of the sound barrier, and I want to compliment Mr. ROHRABACHER for introducing it.

Last Sunday marked the 60th anniversary of Captain Charles "Chuck" Yeager's historic achievement that led to the first piloted flight at supersonic speeds.

As an airplane approaches the speed of sound, shock waves build up, creating increased drag, loss of lift and loss of control. Airplanes had previously broken up under these conditions, and brave pilots died.

We now know that the passage from subsonic to supersonic speeds is accompanied by some unusual phenomena which lie in the realm of nonlinear mechanical events, events involving some degree of chaos.

America's bright engineers and brave pilots were not deterred. They were drawn to the challenge of bursting through this obstacle to learn what lies on the other side, where no human had ever been.

On October 14, 1947, Captain Yeager, sitting on four rocket engines, blasted through that invisible barrier. Folks on the ground heard the sonic boom, and they knew that he had made it. His successful test flight freed humankind to travel faster and faster by providing data that enabled the mapping of a path to a supersonic future.

This success required all of the ingredients of successful innovation: technical competence, teamwork, a spirit of optimism and adventure that accepts risk taking.

World War II fighter pilot Captain Chuck Yeager was recognized as the man for this job. The X-1 was a joint project of the National Advisory Committee for Aeronautics, NACA, the Air Force, and Bell Aircraft, with the turbo-pump-equipped rocket made by Reaction Motors, Incorporated. It has been described as a bullet with wings on it, just 31 feet long and a 28-foot wingspan.

It's on display less than a mile from here over at the Air and Space Museum, surrounded by many other great achievements of NACA and its successor, NASA, the National Aeronautics and Space Administration.

The X-1 and subsequent aerospace achievements have kept us where the action is and kept us technologically competitive. We want to stay in this game for the next 60 years, and so I will continue to work to keep America technologically competitive in aerospace and in all other areas of innovation.

And with this resolution, I pay my respects to Chuck Yeager and to the many men and women of America's great aerospace tradition. I thus want to voice my support for this resolution, and I urge its adoption.

Mr. Speaker, I reserve the balance of my time.

Mr. FEENEY. Mr. Speaker, I want to thank Mr. LAMPSON, and I yield the initial 7 minutes of my time to the prime sponsor of the resolution, my friend from California (Mr. ROHRABACHER).

Mr. ROHRABACHER. Mr. Speaker, I thank Mr. LAMPSON and Mr. FEENEY for their hard work they have been doing here, not just on this legislation but overseeing America's space program. You certainly have my respect and my support, and I'm happy today for their support for this legislation.

This bill takes note and honors America's historic aeronautic accomplishments on the 60th anniversary of one of our great aviation milestones, that of achieving mach 1, better known as breaking the sound barrier.

It also honors those American scientists and technologists who conceived and designed the Bell XS-1, as well as the courage of the hero who flew the plane, General Chuck Yeager of West Virginia.

The leadership of Larry Bell of Bell Aircraft and John Stack of NACA, which is the predecessor of NASA, are also recognized and applauded here today.

The sound barrier was not called a barrier for nothing. As an aircraft approaches the sound barrier, many of the subsonic rules of aerodynamics change radically. Conventional airplanes that had flown close to mach 1 before that, and they had done this mainly when they were diving, were known to have shaken violently and quite often lost control. On that morning of October 14, 1947, the principles of supersonic flight were still not proven. It was unknown whether an airplane could surpass the speed of sound and survive.

The XS-1 was pushing the envelope and it was dangerous. Behind the plane, it was really a rocket, as described, a rocket with wings, which is sort of like the plane I have here. Behind that lay the hard work and dedication of pioneering American scientists and engineers who were to write the book on supersonic design, beginning with the XS-1 project.

The XS-1, a bullet with wings, as they say, was the first high-speed aircraft built purely for aviation research purposes, and the XS-1 project was destined to demonstrate that controlled, sustained flight was possible at supersonic speeds.

In addition, this bill honors Chuck Yeager of West Virginia and all that he represents in America's experimental aeronautics programs. Besides not knowing whether the aircraft would break the sound barrier without breaking apart, no one knew whether the human body could survive the kinds of

forces Yeager was about to undergo. He was one of the best and the bravest, and he was, as Tom Wolfe described him, an individual with the right stuff.

Not only did he reach mach 1 on that October morning at Edwards Air Force Base, but he has repeated that on many occasions since, including October 1997 on the 50th anniversary of his flight. His life has been an inspiration to generations of young Americans and, yes, to young people throughout the world.

And so on that October morning, American expertise in aeronautic science and technology, and its human skills and experience in flight, were put to the test and came together to tear down the sound barrier wall and lead the way to a new era of aviation and to the space age beyond.

To continue that tradition and the tradition of these pioneers, I will be introducing an aeronautics and space prize scholarship bill this week. This legislation will create a National Endowment for Space and Aeronautical Technology Development, and it will include a scholarship program, but its primary mission is to provide prizes for those who break technology barriers and enable the further exploration and utilization of space. Certainly, Chuck Yeager would have won one of these prizes.

So I would ask my colleagues to join BART GORDON, RALPH HALL, BUD CRAMER and others who are in this in bipartisan support for creating the National Endowment for Space and Aeronautics Technology Development.

I would also ask my colleagues to join me tonight in supporting H. Res. 736, honoring the 60th anniversary of this great milestone in aeronautics and space technology development.

Mr. LAMPSON. Mr. Speaker, I reserve the balance of my time.

Mr. FEENEY. Mr. Speaker, I yield myself such time as I may consume.

I'm proud to be a cosponsor of this resolution, along with Mr. LAMPSON, that Mr. ROHRABACHER is the prime sponsor of, and it does a number of important things.

It congratulates the National Advisory Committee for Aeronautics and their test pilots. This was the successor agency to what we now know as NASA. It honors the bravery of Chuck Yeager and all of the many other test pilots that took on such risks, and it basically emphasizes a strong and robust aeronautics research program for America.

As both Mr. LAMPSON and Mr. ROHRABACHER have pointed out, Mr. Yeager's historic flight on October 14, 1947, breaking the sound barrier was a very dangerous and precarious experiment. At that time, pilots routinely risked losing control of their aircraft or, sadly, lost their lives due to extreme forces on the airplane.

But it's not just that great flight that made Chuck Yeager such a great test pilot in America. Chuck Yeager was only 24 when he flew the Bell X-1 on the famous flight above the Muroc

Army Air Field in California. Two days prior to his record-breaking flight, Mr. Yeager broke two ribs after falling off a horse. Fearing that knowledge of this injury would disqualify him from the scheduled flight, he hid his injury from his superiors and, as a result, had to improvise a way to close the latch on his plane.

Having successfully broken the sound barrier, others soon followed in Mr. Yeager's footsteps, flying newly designed aircraft at higher and higher speeds to help scientists and engineers gain critical knowledge about transonic and supersonic flight.

Only 6 years later, Chuck Yeager flew another Bell-designed rocket plane at more than twice the speed of sound.

A veteran of the Second World War, General Yeager flew P-51 Mustangs in the European theater. He ended the war credited with 61 missions and 11.5 shootdowns of enemy aircraft, including five kills in just 1 day. He was himself shot down over France, and with the help of the French Resistance, was able to make his way back to England where he continued flying against the Axis powers.

In the years following his historic flight, General Yeager continued an illustrious career in the Air Force. Among other accomplishments, he was the first commanding officer of the Air Force Aerospace Research Pilot School and a commander of fighter wings and squadrons in Germany and southeast Asia during the Vietnam War. He also continued to work for NASA as a consulting test pilot.

On the 50th anniversary of his supersonic flight in 1997, General Yeager, then 74, piloted an Air Force F-15 Eagle past mach 1.

General Yeager is a native of West Virginia and today resides in California. He's a gifted pilot who spent his career in service to his country, sometimes at extreme risk, defending our shores and advancing our understanding of aeronautics.

Mr. Speaker, I'm proud to be a cosponsor and supporter of H. Res. 736, commemorating the 60th anniversary of General Yeager's first flight exceeding the speed of sound. And with that, I would urge my colleagues to support this resolution.

Mr. Speaker, I yield back the balance of my time.

Mr. LAMPSON. Mr. Speaker, I have no more speakers. I'll just say that we commend Chuck Yeager for his bravery and for the work that he did to give us an opportunity to change the world, and we are quite excited about what transpired since that time and looking forward to what's going to happen in the future.

With that, Mr. Speaker, I encourage all of our colleagues to enthusiastically support this resolution.

Mr. UDALL of Colorado. Mr. Speaker, I rise in strong support of this resolution.

I am an original cosponsor of H. Res. 736 because it is important to recognize one of the amazing achievements of the Nation's aeronautics R&D enterprise.

I also think it important to honor Captain Yeager and the other brave test pilots who have helped push back the boundaries of flight—with results that have benefited our security, our economic well-being, and our quality of life.

As Chairman of the Space and Aeronautics Subcommittee of the Science and Technology Committee, I am well aware that this amazing achievement was not an isolated event. It is just one thrilling chapter in the great story of American aviation and aerospace.

I am pleased that our predecessors in Congress recognized the importance of aeronautics, and invested in it.

Americans were drawn to the challenges of advancing the state of aeronautics, and they gave much of their discipline and intelligence to overcome seemingly insurmountable technical obstacles.

At times, bravery was required, too, and the breaking of the sound barrier is a good example of that.

Today we honor the 60th anniversary of Captain Chuck Yeager's breaking of the sound barrier, but we also take inspiration from it to renew our commitment to ensuring that America remains preeminent in aeronautics R&D.

I urge my colleagues to support this resolution.

Mr. LAMPSON. Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Texas (Mr. LAMPSON) that the House suspend the rules and agree to the resolution, H. Res. 736.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the resolution was agreed to.

A motion to reconsider was laid on the table.

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#### COMMENDING NASA LANGLEY RESEARCH CENTER ON ITS 90TH ANNIVERSARY

Mr. LAMPSON. Mr. Speaker, I move to suspend the rules and agree to the concurrent resolution (H. Con. Res. 222) commending NASA Langley Research Center in Virginia on the celebration of its 90th anniversary on October 26 and 27, 2007.

The Clerk read the title of the concurrent resolution.

The text of the concurrent resolution is as follows:

H. CON. RES. 222

Whereas in 1917, the Nation's first civilian aeronautical research laboratory was established by the National Advisory Committee for Aeronautics in Virginia, and named Langley Memorial Aeronautical Laboratory;

Whereas such laboratory, now called the National Aeronautics and Space Association (NASA) Langley Research Center, is one of the Nation's most prolific and most honored aerospace laboratories with a rich history of pioneering aviation breakthroughs, exploring the universe, and conducting ground breaking climate research;

Whereas NASA Langley Research Center helped give birth to the space age by, among other accomplishments, conceiving and managing Project Mercury, the first United

States manned space program, training the original seven astronauts, proving the feasibility of the lunar orbiter rendezvous, developing the lunar excursion module concept and research facilities for simulating landing on the Moon, and successfully sending the first Viking landers and orbiters to Mars;

Whereas NASA Langley Research Center is one of the leading aerospace research laboratories in the world and has consistently been a source of technology that has made aerospace a major factor in commerce and national defense;

Whereas NASA Langley Research Center aeronautics research has benefitted the United States military tremendously through the application of new technologies to the Nation's military, commercial, and experimental aircraft;

Whereas NASA Langley Research Center continues to make significant innovative contributions to aviation safety, efficient performance, and revolutionary vehicle designs for flight in all atmospheres, including developing key technologies for the next generation of air transportation systems;

Whereas NASA Langley Research Center has contributed through its research over the past several decades critical technologies to the United States aviation industry, which is a vital sector of the economy that employs over two million Americans and comprises roughly nine percent of the country's gross national product;

Whereas NASA Langley Research Center continues to provide critical research and development that advances the Nation's future in space exploration, scientific discovery, systems analysis, and aeronautics research while generating \$2.3 billion in revenue and 21,000 high-tech jobs for the United States economy;

Whereas NASA Langley Research Center is known for unparalleled technology transfer to both aerospace and non-aerospace businesses, and for its commitment to inspiring the next generation of explorers, both of which have enormous benefit to the public and the national economy; and

Whereas NASA Langley Research Center celebrates its 90th anniversary on October 26 and 27, 2007, and continues pioneering the next frontier in aeronautics and space: Now, therefore, be it

*Resolved by the House of Representatives (the Senate concurring), That Congress congratulates and commends the men and women of NASA Langley Research Center for their accomplishments and role in inspiring the American people.*

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Texas (Mr. LAMPSON) and the gentleman from Florida (Mr. FEENEY) each will control 20 minutes.

The Chair recognizes the gentleman from Texas.

#### GENERAL LEAVE

Mr. LAMPSON. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on the resolution now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. LAMPSON. Mr. Speaker, I yield myself such time as I may consume.