

MESSAGE FROM THE PRESIDENT

A message in writing from the President of the United States was communicated to the House by Ms. Wanda Evans, one of his secretaries.

EXPRESSING CONDOLENCES OF THE HOUSE TO THE FAMILIES OF THE CREW OF THE SPACE SHUTTLE "COLUMBIA"

Mr. DELAY. Mr. Speaker, I offer a resolution (H. Res. 51) expressing the condolences of the House of Representatives to the families of the crew of the Space Shuttle *Columbia*, and for other purposes, and ask unanimous consent for its immediate consideration pursuant to the following order:

Debate on the resolution shall be limited to 2 hours equally divided and controlled by the majority leader and the minority leader or their designees; and the previous question shall be considered as ordered on the resolution to final adoption without intervening motion.

The Clerk read the title of the resolution.

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

There was no objection.

GENERAL LEAVE

Mr. DELAY. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days within which to revise and extend their remarks on H. Res. 51.

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

There was no objection.

The SPEAKER pro tempore. The gentleman from Texas (Mr. DELAY) and the gentlewoman from California (Ms. PELOSI) each will control 1 hour.

The Chair recognizes the gentleman from Texas (Mr. DELAY).

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

Mr. Speaker, I begin by observing that Members of this House share a special reverence and appreciation for Americans who risk their lives in the service of freedom. So on their behalf, let me extend our deepest gratitude and condolences to all the people who have entrusted the United States with their loved ones aboard *Columbia*.

Let us also offer the same spirit of solace to the men and women of Israel.

We hope that, through faith, God's healing comfort will lift our friends with heavy hearts to the "place of broad rivers and streams" with their grief receding upon the far shores.

Space is an American mission. And our accomplishments in space have led to some of our proudest hours as a country. During wartime, it is even more important to pursue goals that are more capable of rallying all of us.

Americans will not be motivated by petty goals or timid objectives. Appeals of this sort fall on deaf ears. Only bold ideas and audacious goals seize

our attention in this country. So what will it take?

We need daring dreams that strain the bonds of conventional wisdom. We need to begin journeys that are capable of challenging innately American qualities of ingenuity and determination, curiosity and courage.

An American always seeks to climb the next hill, to cross the next river, and to reach the next valley. We are born with an insatiable hunger to look over the horizon. It is a quality that runs through the special clay from which our maker formed us, and it holds true for Americans wherever they are born, because the magic of our principles exerts a magnetic pull upon people who are destined to be Americans. They are drawn home to us, just as Colonel Ramon, a man of determined actions and courageous curiosity, was drawn to Texas to share life's dream with our six intrepid Americans.

We are special. The people of this country will reject shallow goals. We need a space program that aspires to meet our lofty expectation. Ronald Reagan liked to quote the poet Carl Sandburg who wrote, "The Republic is a dream. Nothing happens unless first a dream."

We know what we have done, but only in our dreams do we learn what we can do. Space exploration is destined to remain the highest expression of our national dreams.

President Theodore Roosevelt properly summed up the spirits that have driven so many of our fellow citizens to cross countless boundaries.

"Far better it is," said Roosevelt, "to dare mighty things, to win glorious triumphs, even though checked by failure than to take rank with those poor spirits who neither enjoy much nor suffer much because they live in a gray twilight that knows not victory nor defeat."

For 4 decades, Americans have known that human space flight is the most dangerous and daring endeavor human beings have ever attempted. The seven men and women of *Columbia* risked their lives to dare bold dreams and advance the boundaries of human knowledge. This courage is the work of our creator.

As we lost sight of our heroes through flames in the forehead of the morning sky, we can take great solace in knowing that they are now beyond pain. All of them have now been safely returned to the folds of our master's cloak.

For comfort and for consolation, let us turn to the Psalmist: "The highest heavens belong to the Lord, but the Earth he has given to man. It is not the dead who praise the Lord, those who go down to silence; it is we who extol the Lord, both now and for evermore. Praise the Lord."

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

The SPEAKER pro tempore. The gentlewoman from California (Ms. PELOSI) is recognized for 1 hour.

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

Mr. Speaker, I rise to join the distinguished majority leader in introducing the House Resolution honoring the crew of Space Shuttle *Columbia*. I wish to express my condolences to the distinguished majority leader and our colleague, the gentleman from Texas (Mr. LAMPSON), in whose district the Johnson Space Center is domiciled; and to all of our colleagues from Texas, to them and to their constituents we offer our deepest, deepest sympathy.

The astronauts trained and lived in Houston, traveled 6 million miles away; and as President Bush said so eloquently yesterday, "We lost them so close to home."

Yesterday I had the privilege of joining many of my colleagues in traveling to Houston for a memorial service honoring the seven heroic astronauts who were lost on Saturday morning when the Space Shuttle *Columbia* exploded just minutes before its scheduled landing.

These brave men and women made the ultimate sacrifice so that we might enhance our understanding of the universe. They have the eternal gratitude of an entire Nation and, indeed, the entire world.

Mr. Speaker, I would also like to acknowledge and pay my respects to Sean O'Keefe, the administrator of NASA, and the people who work at NASA, for their dedication, for their courage and to acknowledge the suffering they are going through having lost their friends.

The world mourns the deaths of Air Force Colonel Rick Husband, the shuttle's commander; Navy Commander Willie McCool, the mission's pilot; Air Force Lieutenant Colonel Michael Anderson, the payload commander in charge of the science equipment; Dr. Kalpana Chawla, an aerospace engineer, an exceptional young woman; Navy doctors Captain David Brown and Commander Laurel Salton Clark; and Colonel Ilan Ramon, the first Israeli in space.

I want to extend my condolences to Prime Minister Sharon and the people of Israel on the loss that they and we have suffered in losing Colonel Ilan Ramon. We are all blessed to have had such outstanding men and women serving in our space program.

For more than 4 decades, the space program has been a bold expression of American optimism. Who can forget the burst of national pride when our former congressional colleague John Glenn first orbited the Earth in 1962, and again 7 years later when Neil Armstrong took that one small step for man, that one giant leap for mankind?

Perhaps that spirit was best expressed by the philosopher Socrates, who lived thousands of years before space travel began. He said, "Humanity must rise above the Earth, to the top of the atmosphere and beyond, for only then will we fully understand the world in which we live."

Space travel has been driven by more than a sense of adventure and curiosity. Our forays into space have been about advancing the human conditions in science and discovery. NASA and the space program have helped put the United States on the technological cutting edge, strengthening our economy and fortifying our national defense.

Space exploration has led to life-saving medical research, high-performance computers, and ground-breaking satellite technologies. Driven by the need to provide energy to satellites and spacecraft, NASA spurred the development of solar photovoltaic cells and fuel cells. By collecting data about Earth's geology, atmosphere and water, the space program helps us protect the environment and use our natural resources wisely.

The space program alone has contributed to the development of everything from life-saving heart pumps to ultraviolet-protection suits, to increasing our knowledge of global warming and the aging process.

The exploration of other worlds has allowed us to enhance our understanding of our own world. The search for life elsewhere in the universe has enriched our lives here on Earth. But like any ambitious mission worth undertaking, space travel is not without risk; and in this case, tragically, the risk is measured in human lives.

During these days of mourning, our thoughts and prayers are with the families of the astronauts. I hope that it is a comfort to them that the whole world mourns their loss and is praying for them at this sad time. And so it is with great sadness that I join my distinguished colleague, the majority leader, in introducing this resolution honoring the crew of the Space Shuttle *Columbia*.

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

Mr. DELAY. Mr. Speaker, I yield 3 minutes to the gentleman from Missouri (Mr. BLUNT), the distinguished majority whip.

Mr. BLUNT. Mr. Speaker, I thank the gentleman for recognizing me and him and the gentlewoman for introducing this resolution.

Just a week ago, America remembered the anniversary of the loss of the Space Shuttle *Challenger* and its crew as it headed toward orbit. This week America is grieving the loss and praying for the families of the seven-person crew of the Space Shuttle *Columbia* which was destroyed suddenly and unexpectedly as it headed back to Earth.

America's manned space program has used science, technology and experience to reduce the risk of space travel. Exploring space and space travel have never been risk free, but they have given us the ability to keep improving things on Earth, as well as to keep improving the program itself.

We learned when three *Apollo* I crew members perished in January of 1967 in a fire during a test that the use of purified oxygen in a space craft's cabin was

hazardous. We made improvements. We learned when seven astronauts were killed in January of 1986 when the *Challenger* broke apart during launch that there were design flaws with the O-ring system in the booster rockets. We made improvements.

Whatever we learn from last Saturday's tragedy will push our space program further than it has been before and make it safer than it has been before.

We will soon see an international space station built and completed. America has led the way, pushing the limits of space and for people that were Earthbound a little more than a century ago.

The pursuit of space with an international coalition was reflected in the brave crew that perished on Saturday. Kalpana Chawla told Mission Control how beautiful the Earth looked from miles above as she summoned the crew to the shuttle window. Chawla logged more than 376 hours in space.

Colonel Ilan Ramon, as the gentlewoman from California (Ms. PELOSI) just mentioned, was the son of a Holocaust survivor, Israel's first space traveler. He spoke about the quiet of space and was quoted saying, "I only hope that the quiet can one day spread to my country."

□ 1530

Ramon was selected as a payload specialist by the Israeli Air Force and approved by NASA in 1998. He reported for training at NASA's Johnson Space Center in Houston in July 1998 and was making his first space flight.

Navy flight surgeon Laurel Clark liked to say, "Life continues in a lot of places." She was selected by NASA in 1996. It was her first space flight.

Air Force colonel Rick Husband, the shuttle commander, loved the hymn "How Great Thou Art," which includes the phrase, "I see the stars. I hear the mighty thunder. Thy power throughout the universe displayed." Selected in 1994, Husband logged more than 235 hours in space.

As a boy, Navy flight surgeon David Brown thought of astronauts as movie stars and grew up to be a physician, an aviator who could land on the deck of a carrier in the middle of the night. Later, he became a shuttle astronaut.

Columbia pilot William McCool was a former Eagle Scout and test pilot. He was in space his first time.

Payload commander Michael Anderson said recently to his pastor, If this thing does not come out right, do not worry about me; I am going on to a higher place. Commander Anderson has told people he could not recall a time when he did not want to be an astronaut.

Congress will be asking questions and will provide oversight in an attempt to understand the loss of *Columbia* and its crew. The goal is to further reduce the risk for future shuttle flights.

May the crew of the Space Shuttle *Columbia* be with God and may God be with those they have left behind.

Ms. PELOSI. Mr. Speaker, I am pleased to yield 3 minutes to the distinguished gentleman from Texas (Mr. LAMPSON). The Johnson Space Center is domiciled in his district. He probably had more constituents affected by this tragedy than any other Member, and in yielding him the 3 minutes I also yield him the privilege of managing the rest of the time on this important resolution.

The SPEAKER pro tempore (Mr. MILLER of Florida). Is there objection to the request of the gentlewoman from California?

There was no objection.

Mr. LAMPSON. Mr. Speaker, I thank the gentlewoman, the minority leader, for yielding me the time, and also it is a pleasure to have joined her and our majority leader yesterday and all of our colleagues who came to Houston to express their condolences at the wonderful memorial service there.

Mr. Speaker, I rise today in support of this resolution honoring the *Columbia* shuttle and her crew. Many of my colleagues have and will express the impact that this tragedy has had on our Nation far more eloquently than what I can.

I share their feelings, but I would also like to talk about what the loss of the Space Shuttle *Columbia* means to the 9th Congressional District of Texas, the home of the Johnson Space Center.

While the Clear Lake area shares the national vision for an aggressive and exciting manned space program, back home the space shuttle and the international space station take on even more personal dimension. All of the astronauts in the NASA program, including the seven aboard the *Columbia*, are part of our community. They are our friends and our neighbors. Their kids go to school with our kids. They shop at the same grocery stores and pray at the same churches and synagogues.

The employees and contractors at the Johnson Space Center are connected to the astronauts not just at work but in their everyday life. The community at JSC is an extended family. Amidst all the lofty talk, ceremonies and resolutions, let us not forget that a community and seven families lost friends, brothers, fathers, sons, wives, sisters, mothers, and daughters.

Back in Clear Lake, right off the Johnson Space Center campus, there is a place called Frenchy's. It is a place where the astronauts and employees often go for dinner, gather after work, share their experiences and bond in a very special way. I stopped by there Saturday evening and wanted to report back to my colleagues what I saw and heard.

Ironically, the traditional after-mission autographed crew mission picture hung on the wall where it belonged. For some reason, they went by before their mission instead of after.

There was a feeling of crushing sadness and loss but also a hope that the

vision and dream that those seven heroes died for will not be lost but, instead, will be reborn; that their loss will remind the American people of the great challenge we face and the prospect of a better world that the space program gives us.

I speak today not just as a Member of Congress but as part of a community that firmly believes in what Rick Husband, William McCool, Michael Anderson, David Brown, Kalpana Chawla, Laurel Blair and Ilan Ramon gave their lives for. On behalf of the 9th District of Texas and the people of the Johnson Space Center, I urge this country and this body to go forward, support this resolution and support the continued presence of America in space.

Mr. Speaker, I reserve my time.

Mr. DELAY. Mr. Speaker, I yield 1 minute to the gentleman from Florida (Mr. LINCOLN DIAZ-BALART).

Mr. LINCOLN DIAZ-BALART of Florida. Mr. Speaker, I thank the majority leader for yielding me the time.

Mr. Speaker, our thoughts and prayers today here in the Congress of the United States are with the seven heroes of the *Columbia* and with their families.

The space program is emblematic of the American people: daring, self-confident, brave and determined to do great things.

I think the seven heroes of the *Columbia* would be pleased if we here and now determine and resolve to support the space program with renewed and increased vigor and seriousness. Commander Rick Husband; pilot William McCool; payload commander Michael Anderson; mission specialists David Brown, Laurel Clark and Kalpana Chawla; and the Israeli astronaut Ilan Ramon, they gave their lives to improve all of our lives; and we, Mr. Speaker, owe them our full support for the continuation of space exploration.

Mr. DELAY. Mr. Speaker, if I could, in order to even out the time, I yield 3 minutes to the gentleman from Arizona (Mr. HAYWORTH).

(Mr. HAYWORTH asked and was given permission to revise and extend his remarks.)

Mr. HAYWORTH. Mr. Speaker, I rise in strong support of this resolution; and, oh, how I wish we were not in this well at this time to express such sentiments.

Mr. Speaker, we differ on issues. That is the hallmark of a free people, and yet this afternoon we rise as one to remember and memorialize the contribution and the sacrifice of the *Columbia* Seven.

Of the seven aboard, Mr. Speaker, several had connections to Arizona, perhaps the most pointed and poignant that of payload specialist Michael Anderson. Though Michael called Spokane, Washington, home, he spent some of his younger years in the State of Arizona, attended Avondale Elementary School and carried with him on this flight a T-shirt from that school and that student body. The principal at

Avondale Elementary now says another type of special memorial will be there in the school to remember that special student.

Indeed, also in our West Valley, Mr. Speaker, there is the *Challenger* Learning Center, so named for another group of seven who paid the ultimate price; and at Central Arizona College there is a NASA Aerospace Education Center.

Mr. Speaker, we are reaffirming some difficult lessons today, even as we memorialize and celebrate America's mission and indeed mankind's mission to the stars, as we think that over four decades ago President Kennedy stood at the podium behind us, challenging this Nation to land a man on the moon and bring him safely back home to earth before the decade of the 1960s is out.

Mr. Speaker, we remember the message of the Australian Prime Minister upon the landing on the moon when he said, We salute the spirit of dangerous adventure that has brought mankind to this accomplishment.

The danger remains apparent. The spirit of adventure remains, Mr. Speaker. We remember and memorialize the *Columbia* Seven; and as we remember, as we rededicate, as we conduct the inevitable oversight that our Constitution mandates, let us make the vow not to retreat but to advance, to think beyond what has gone before, to revisit the moon, to one day be involved in manned exploration of Mars, to continue the advancement of human knowledge for which the *Columbia* Seven gave their all. That is the true memorial to these heroes who soared in the heavens and embraced the spirit of dangerous adventure.

God bless them and their families and all affiliated with them and our great country.

Mr. LAMPSON. Mr. Speaker, I yield 2 minutes to the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON), my colleague from the Committee on Science.

(Ms. EDDIE BERNICE JOHNSON of Texas asked and was given permission to revise and extend her remarks.)

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, let me express my appreciation to the leadership for bringing this forth and to say how important it is that we take the time to give recognition to those heroic persons who did lose their lives. I am very certain, however, that they did not lose their lives in vain.

This space exploration research program has been one of the most successful research programs in the history of this country, and I know that we will investigate well to see what happened and improve upon it.

I also know that, over 40 years ago, the foresight of persons that came along before us caused us to get into this type of research. We also owe those leaders some homage for their foresight, and I am hoping that we will then have the foresight to continue this type of research.

The scientific technological advances made possible by space research include much: arteriosclerosis detection, ultrasound scanners, the automatic insulin pump, portable X-ray devices, invisible braces, dental arch wire, palate surgery technology, clean room apparel, implantable heart aid, the MRI, the bone analyzer and the cataract surgery tools and on and on, the digital imaging breast biopsy system.

So many, many lives have been saved because we have lost a few in trying.

The life-saving light that saves lives through the application of lighting technology initially developed for plant growth experiments on space shuttle missions. The doctors at the University of Wisconsin in Milwaukee use light-emitting diodes in a treatment called photodynamic therapy, a form of chemotherapy to treat brain tumors in children and aid significantly in wound-healing treatment.

A consumer product, the toy for tots, many, many toys have been made because of that, that has increased the economy, and I could go on, with the artificial heart device known as the miniaturized ventricular assist pump. The vehicle tracking system, and many of us drive cars that have the night-extended sight vision, came from space exploration.

Mr. Speaker, I will end by simply saying the best way to show our appreciation for these heroes is to continue this research and be a visionary for the future. Without vision, we perish.

Human space exploration is inherently risky. Distance, speed and an environment that can not support human life combine to make human space flights particularly precarious.

Unfortunately the world has new evidence of the dangers associated with space exploration. Millions watched as images of a singular, brilliant point of light in the sky became two, three, and four points of light as Space Shuttle *Columbia* broke apart over my home State of Texas.

I join the rest of the country and the world in mourning the seven brave astronauts whom we lost in this national tragedy. The outpouring of sympathy from the citizens of the world is recognition that the crew heroically put their lives on the line in the name of science and research.

More than a decade ago, January 28th, 1986, our country's space program was dealt another tragedy as we lost the crew of the Space Shuttle *Challenger*. The findings of the "Report of the Presidential Commission on the Space Shuttle *Challenger* Accident" (referred to as the Rogers' Commission Report) have changed NASA procedures to make human space flight safer. It is incumbent upon the federal government to conduct a vigorous and comprehensive investigation to uncover and alleviate the events that led to *Columbia* accident.

I pledge to do what I can to help our space program recover from this terrible setback so these important endeavors can flourish in the future. As a Senior member of the Science Committee, I will work closely with my House colleagues to assist NASA and Harold Gehman Jr. who will lead the special investigative commission.

I am the ranking member of the Science Subcommittee on Basic Research. In this important capacity, I have taken a major leadership role regarding America's commitment to technological development and scientific research and application. As such, I am a firm believer that the United States will continue our space program that has accomplished so much in the areas of research and science.

This important and beneficial program is essential to advancing technology.

Specific technological advances made possible by space research include the arteriosclerosis detection, ultrasound scanners, automatic insulin pump, portable x-ray device, invisible braces, dental arch wire, palate surgery technology, clean room apparel, implantable heart aid, MRI, bone analyzer, and cataract surgery tools.

The Space Shuttle Program has yielded many lifesaving medical tests, accessibility advances for the physically challenged, and products that make our lives more safe and enjoyable. Such as:

The Digital Imaging Breast Biopsy System developed from Space Telescope technology incorporates the advanced Charged Coupled Device, a high tech silicon chip, used as part of a digital camera system that sees the breast structure with x-ray vision. The CCD images breast tissue more clearly and efficiently through a procedure known as stereotactic core then-needle biopsy.

With the help of companies like FIDE and LORAD, this procedure provides patient with non-invasive procedure which reduces pain, scarring, radiation exposure, time and cost. The Space Shuttle was the vehicle used to assist in the space telescope repair mission and development of the technology.

Lifesaving Light Saves Lives through application of a special lighting technology initially developed for plant growth experiments on Space Shuttle missions. Doctors at University of Wisconsin in Milwaukee use light emitting diodes in a treatment called photodynamic therapy, a form of chemotherapy, to treat brain tumors in children and aid significantly in wound healing treatment.

A Consumer Product Toy for Tots was developed using NASA wind-tunnel and aerodynamic expertise from the Space Shuttle program. Hasbro, Inc. improved the flying distances and loop-to-loop stunts for its toy gliders designed for a child to fly.

Public Safety takes a Byte out of Crime using image processing technology initially used to analyze Space Shuttle launch video and study meteorological images. This Space Shuttle mission technology helps law enforcement agencies improve crime solving videos.

An Artificial Heart device known as the miniaturized ventricular assist pump, developed by NASA and renowned heart surgeon Dr. Michael DeBakey, was derived from technology used in Space Shuttle fuel pumps. The tiny pump—2 inches long, 1 inch in diameter and weighing less than four ounces has been successfully implanted into more than 20 patients.

A Vehicle Tracking System tracks information originally used onboard Space Shuttle missions now helps track vehicles on Earth. This commercial spinoff allows vehicles to transmit a signal back to a home base. Municipalities today use the software to track and reassign emergency and public works vehicles. It also is used by vehicle fleet operations, such as taxis, armored cars and vehicles carrying hazardous cargo.

As witnessed, the Space Shuttle can be configured to carry many different types of equipment and scientific experiments. The Space Shuttle is essential in the assembly of the International Space Station (advancing life sciences & technology through long-duration missions) and repairing and servicing the Hubble Space Telescope (enabling many new discoveries in Space Science).

As an enabling function, the Space Shuttle is fully engaged in providing services for earth and physical science research. The Space Shuttle also engages the private sector in the development of space by providing flight opportunities for industry, academia and government to conduct applied research relevant to NASA's mission through access to the space environment. I will foresee that cooperative activities with the National Institutes of Health (NIH), the National Science Foundation (NSF), the Department of Defense (DoD) and other U.S. agencies will continue to advance knowledge of health, medicine, science and technology.

STS-107, which was lost on February 1, 2003, was a 16-day mission dedicated to research in physical, life, and space sciences, conducted in approximately 80 separate experiments, comprised of hundreds of samples and test points. With two Americans and a Russian still stationed at the International Space Station, it is imperative that this program not come to a halt. This most unfortunate and tragic loss of five men and two women, representing a mosaic of races and nationalities, will be mourned and these great American heroes will not be forgotten.

Mr. DELAY. Mr. Speaker, I ask unanimous consent that the gentleman from New York (Mr. BOEHLERT), the Chairman of the Committee on Science, manage the remainder of my time.

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

There was no objection.

Mr. DELAY. Mr. Speaker, I yield 4 minutes to the gentleman from Florida (Mr. FEENEY) and send condolences because the gentleman's wife is part of the NASA family and has also suffered this loss.

(Mr. FEENEY of Florida asked and was given permission to revise and extend his remarks.)

□ 1545

Mr. FEENEY of Florida. Mr. Speaker, I thank the gracious majority leader and minority leader also for their resolution today.

Mr. Speaker, the *Columbia's* crew made remarkable use of their gift of life. To borrow thoughts from the late Christopher Lasch, these astronauts belonged to a band of people who achieve selflessness by dedicating themselves to a tremendous challenge, mastering arduous, risky pursuits, meeting impersonal standards, and struggling towards an ideal of perfection.

As you listen to the crew's family members and loved ones, you grasp that their strivings were not solitary. Each astronaut was surrounded by those who supported his or her calling.

Many people have calls, but few are blessed to be so unconditionally loved and supported, especially when their pursuit involves danger, risk, and the unknown. During their all-too-brief lives, each member of *Columbia's* crew achieved greatness because somebody told them they should follow their hearts.

Columbia's crew pursued life with passion. But Saturday reminded us of that word's Greek roots. Passion means "to suffer." And to follow one's passion requires the acceptance of suffering as well as the joy of living life with fullness and with purpose.

The space family is large and extended. Although Kennedy Space Center employees, many of my constituents, remain here on Earth, each mission carries their hopes and dreams into space. They are bonded to the astronauts as comrades. My family belongs to that space family. My wife, Ellen, has been an engineer at Kennedy Space Center for 18 years. Tommy, my 10-year-old, who is in fifth grade, attended space camp this summer. Hanging on Tommy's wall at home, next to a poster of Michael Jordan, is another Michael, Michael Anderson, the payload commander on *Columbia*, who autographed a picture for Tommy, which is inscribed, "Tommy, always do your best."

Michael Anderson and the other courageous astronauts and the entire NASA team always do their best. At an all-hands meeting of the KSC team last Saturday, actually this Monday, KSC Director Roy Bridges affirmed: "You are the best team on the planet." So this large and talented team shares many triumphs.

Still, every generation of this Cape Canaveral family unexpectedly bears witness to manned space flight's inherent dangers. In 1967, the *Apollo 1* crew was lost on Pad 34 in an accident known simply as "The Fire." In 1986, the *Challenger* rose majestically from Pad 39B only to break up over the Atlantic on a beautiful winter day. On February 1, 2003, the landing crew waited at the Shuttle Landing Strip for voyagers who never returned home.

On each occasion, the people of NASA grieved terribly. They asked tough questions, and they learned from adversity. But then they rededicate themselves to their mission and ultimately achieve their striving. America landed on the Moon after "The Fire." The shuttle returned to pursue scientific discovery and construct the International Space Station. And we will continue that legacy by returning men and women to space, completing the International Space Station and turning our dreams of new exploration towards the planet Mars and others.

Exploration, journey, and bravery define the American people and their history. Each of us comes from a heritage where someone with great courage took a passage to new beginnings, many times with difficult endings. But the living stubbornly persevered,

pushed back vast frontiers, and built a great and glorious Nation. Adversity, including Saturday's loss, can never extinguish America's spirit.

Finally, Mr. Speaker, as Ronald Reagan said in the aftermath of the *Challenger* disaster, "The future belongs not to the fainthearted but to the brave. That defines us as a Nation."

Mr. LAMPSON. Mr. Speaker, I yield 2 minutes to the gentleman from Texas (Mr. HINOJOSA), who is now the ranking member of the select Committee on Education and the Workforce.

(Mr. HINOJOSA asked and was given permission to revise and extend his remarks.)

Mr. HINOJOSA. Mr. Speaker, I rise today to join my colleagues in expressing my deepest condolences to the family and friends of the seven *Columbia* astronauts who tragically lost their lives Saturday over the skies of Texas. This tragedy is a reminder of the risk involved in exploring the frontiers of space and furthering human knowledge.

Every child, at one time or another, has dreamed of becoming an astronaut to explore distant planets and stars. Unfortunately, many children lose their dream as they grow up. These seven extraordinary people never lost that dream. They dedicated their lives to studies and training to develop the technical skills they needed to become an astronaut.

I attended the memorial service yesterday in Houston, wanting to provide the astronauts' family members some comfort. They are all at different levels of grieving. Everyone spoke of the joy and pride the *Columbia* crew felt in being astronauts and their commitment to sharing their love of space exploration with the next generations. I admire them tremendously.

I know firsthand how inspiring astronauts can be to children. This past fall I hosted the Hispanic Engineering and Science Technology Week in my congressional district. Over 17,000 students and teachers filled the baseball stadium of the University of Texas Pan-American. They listened to speeches about the importance of becoming proficient in science, math and technology in order to expand their career opportunities. But the highlight of the day was when former astronaut Alan Bean rose to speak. The students were transfixed as they listened to him talk about the wonders of space and its potential for mankind's future. The awed and excited expression on those faces as he fired their imaginations is something I will never forget. This is a legacy we must preserve.

I urge my colleagues to continue their support for NASA and the dream for which these seven heroes gave their lives.

Mr. LAMPSON. Mr. Speaker, I yield 3 minutes to the gentleman from Texas (Mr. BELL), who represents a great many employees of the Johnson Space Center.

Mr. BELL. Mr. Speaker, when President Kennedy challenged America to

dream space travel was possible, he came to Houston, Texas, where I live. On an autumn day in 1962, he laid out the following challenge: "We choose to go to the Moon. Not because it is easy, but because it is hard; because that goal will serve to organize and measure the best of our energies and skills; because that challenge is one that we are willing to accept; one we are unwilling to postpone."

That challenge, delivered to America 40 years ago, has come to define the mission for the brave men and women of NASA, and it has also come to define the spirit of Houston. The seven astronauts of Shuttle *Columbia* STS-107 embodied that spirit. And in losing them, we have lost part of ourselves.

The final crew of the Shuttle *Columbia* were all men and women of courage. They lived and died as heroes. But for many in the Houston area, the seven members of the *Columbia* crew were more than fallen heroes. They were our neighbors; and they were our friends, friends that you might see at the grocery store or church or at a parent-teacher conference.

Monday night I had the opportunity to visit with Ilan Ramon's grieving father at Beth Yeshuron Synagogue. Ilan had made his home in Houston for the past 4 years. People knew him to be kind and extraordinarily down to Earth. I told Ilan's father what he already knew, that his son was a hero. He thanked me and then said something that none of us should ever forget. He told me that the space program must continue.

As a tribute to the lives of the fallen crew and those that have gone before them, as an acknowledgment that we can never simply go back to the way it was before John Glenn, Alan Shepard, or the Moon landing, we must continue to answer the call of the Space Shuttle *Columbia*. For those who grieve today, but will hope again tomorrow, we must continue the space program.

As we begin anew, let us remember the words of President Kennedy on that fateful day in Houston: "As we set sail we ask God's blessing on the most hazardous and dangerous and greatest adventure on which man has ever embarked."

Mr. BOEHLERT. Mr. Speaker, I yield myself 3 minutes.

Mr. Speaker, with sadness, I want to join my colleagues in memorializing the crew of the Space Shuttle *Columbia*. All of us on the floor today are trying to do the same thing: we are trying to fill a palpable absence with tangible words. It is quite literally an impossible task and all the more heart-rending because we witnessed the moments when the shuttle vanished into thin air.

I can only begin to imagine the pain felt by the crew's colleagues and friends and family and those who knew these men and women not just as the brave heroes that we have come, perhaps too late, to fully appreciate, but also as individuals, each with his or her

unique personality, accomplishments, and responsibilities. They, much more than us, must live with the absences created by Saturday's tragedy.

But it is not just absence we are acknowledging in our remarks. It is also a presence. The names and faces and stories of the *Columbia* crew are now engraved in our hearts and minds, not just because they died, but because they lived. They were brave, dedicated, and talented; and they set an example for us all. They are as much an inspiration in death as in life, and they join a long line of explorers who have sacrificed their lives charting the future for all of us. We are in their debt.

Yesterday, at the memorial service in Houston, I was taken with the quiet dignity so evident on the part of so many. We, in an hour of pain and sorrow, took our lead from the families. They must know that the Nation, indeed the world, is grieving with them. And as I sat there thinking about lifetimes of achievement snuffed out in a moment of tragedy, I did what so many of us have done. All of us associated with the investigation are determined to find out what went wrong and to fix it. And then we must move on with exploration, with the search for new frontiers. That will be the enduring legacy for the *Columbia* Seven.

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

Mr. LAMPSON. Mr. Speaker, I yield such time as he may consume to the gentleman from Texas (Mr. STENHOLM).

(Mr. STENHOLM asked and was given permission to revise and extend his remarks.)

Mr. STENHOLM. Mr. Speaker, I rise in support of this resolution today.

It is a sad honor to come to the House Floor today to speak about the lives of seven heroes who put a face and personality to the United States space program. And what a face it is—one of strength, optimism, discipline, adventure, humor, compassion—in other words, much of what we strive for as the best of the American Spirit.

These brave Americans gave their lives for the good of our Country and we will never be able to repay them or their families for the sacrifice they made. They were our brightest and best and their passion for advancing and improving our Nation has inspired us all.

Once again, we Americans find ourselves responding to national tragedy with a mixture of strong emotions. We feel great sadness as we mourn this loss of human life and noble endeavor. We know that no matter how great our own sadness might be, it cannot compare to the great weight of grief the astronauts' families and coworkers bear. Our hearts have broken as we have watched the spouses and children deal with their private grief in such a public way. In response, we simply hope that the families can sense the warm embrace of our thoughts and prayers.

But we also feel a great sense of admiration, respect and gratitude. How many of us have stood under a canopy of stars, looked to the heavens and wondered "What is up there?" We have admired our space explorers as heroes since before the first launch of the Mercury program. Perhaps some of us have

even dreamed of becoming a part of this intrepid cadre of astronauts. The *Columbia* crew belonged to that special family of explorers who dare to risk themselves in the name of exploration, discovery and knowledge which will benefit all of humankind. Over the past five days, as we have learned more about that crew of seven individuals, we also have learned about the heart and soul of the space program and also about ourselves.

Just as the planet Earth is home to a diverse people, the *Columbia* carried a crew of numerous nationalities and ethnicities. They learned, as we all must, that it is our diversity, our different skills and traits, which become our strength when focused towards a common goal.

When we humans find ourselves grappling with so many strong emotions, we turn to the Divine Comforter to help us cope and understand; that is precisely what our Country has done this week. Even these astronauts who traveled to the stars understood that they were not the master of those stars. They held a deep and abiding faith in the One who created all which they longed to explore. And now, we must content ourselves in believing that each of these brave men and women is home with that Creator, discovering still more wonders beyond our wildest dreams.

On behalf of the residents of the 17th Congressional District of Texas who I am privileged to represent in the House of Representatives, I extend both sympathy to the families who have lost so much and gratitude for their indomitable spirit. You will never be forgotten.

Mr. LAMPSON. Mr. Speaker, I yield 2 minutes to the gentleman from Virginia (Mr. SCOTT).

Mr. SCOTT of Virginia. Mr. Speaker, I thank the gentleman for yielding me this time.

Mr. Speaker, I appreciate this opportunity to join my colleagues as we express profound sympathy and condolences to the families, friends, and associates of the crew of the Space Shuttle *Columbia* and to pay tribute to the seven heroic men and women who gave their lives in service of their countries and all mankind. I also join my fellow Virginians in a special mourning of the loss of our native son, David Brown, mission specialist of the *Columbia*.

Mr. Speaker, the labors and sacrifices of the *Columbia* crew will not be in vain. The information from over 80 scientific research experiments will unlock discoveries which will reshape the world to the benefit of all of humanity. And so I believe the most profound tribute that we can pay to the seven *Columbia* heroes is to continue the work that they dedicated their professions and ultimately their lives to further. I am proud, Mr. Speaker, that much of that work will take place at NASA Langley in Hampton, Virginia.

Mr. Speaker, the names *Apollo 1*, *Challenger*, and now *Columbia* will be revered throughout time for the supreme contributions and sacrifices of their crews. So I say to the families of those who were lost: weep not. The dreams of the great men and women who dared to explore the outer boundaries of humanity will not be forgotten.

Mr. BOEHLERT. Mr. Speaker, I yield 2 minutes to the gentleman from Geor-

gia (Mr. BURNS); and before he begins, I ask unanimous consent that the gentleman from California (Mr. ROHR-ABACHER) be allowed to control the balance of my time.

The SPEAKER pro tempore (Mr. MILLER of Florida). Without objection, the gentleman from California (Mr. ROHR-ABACHER) will control the remainder of the time of the gentleman from New York (Mr. BOEHLERT).

There was no objection.

Mr. BURNS. Mr. Speaker, Helen Keller once reminded us that "no pessimist ever discovered the secret of the stars, or sailed to an uncharted land, or opened a new doorway for the human spirit."

The seven crew members aboard *Columbia* were optimists, one and all, who saw the uncharted lands of space as an opportunity, not an obstacle. They were willing to open new doorways for humanity at the cost of their own lives.

□ 1600

Mr. Speaker, they left a Nation at war on a mission of peaceful exploration of space. While fate did not return them to us, the memory of their courage, their determination and their optimism for a brighter future will stay with us forever. I support this resolution as one small way of carrying on their memory.

Mr. LAMPSON. Mr. Speaker, I yield 3 minutes to the gentlewoman from Guam (Ms. BORDALLO).

(Ms. BORDALLO asked and was given permission to revise and extend her remarks.)

Ms. BORDALLO. Mr. Speaker, I rise today to join my colleagues and our Nation in expressing our profound sorrow on the occasion of the *Columbia* Space Shuttle tragedy. The people of Guam join their fellow Americans today in mourning for the *Columbia* crew.

Guam has a unique tie to one of the crew members, Lt. Commander William McCool, the pilot on the Space Shuttle *Columbia*. Lt. Commander McCool lived on Guam and attended Dededo Middle School and John F. Kennedy High School. He later married Lani Vallejos of Dededo, Guam, whom he met on the island. We are so proud to have had a member of our island community in the space program. America indeed lost a hero, and Guam lost a son.

Commander McCool was very proud of his ties to our island. He carried the Guam flag on this tragic mission, and I show Members a picture as he stands before the shuttle with our flag.

Willie McCool was a dedicated husband and father. He leaves behind his wife, Lani, and their three sons, Sean, Christopher and Cameron. Lani's parents, Atilana and Albert Vallejos, from Dededo, Guam, proudly attended the launch 16 days prior to the tragedy.

Commander McCool is fondly remembered by those whose lives he touched as a student while on Guam. He was an

exceptional student and a very talented athlete. While at Dededo Middle School, young Willie McCool wrote a poem that was published on the front page of his school newspaper that revealed his love of Guam and his early ambition to be an astronaut. He was probably about 12 years old, and this is the poem:

"I came to an island in the middle of the sea. It was so nice that I jumped for glee. There are palm trees, coconuts and bananas, too. Plus birds and fish, so unbelievable but true. It was so nice that no one can complain. But he who does must be insane. This is such a nice and beautiful place, you'd think it was heaven—or outer space."

Willie pursued his dream with vigor and passion. He lived his dream, and we on Guam are amazed that someone we knew from our island community was the pilot of a space shuttle.

Teachers on Guam point to his remarkable life to inspire school children to dare to dream big things, to believe in themselves, and to reach for the stars. Although we are saddened by this tragedy, we take solace in knowing that Willie McCool will be forever remembered by our Nation and by the people of Guam as an inspiration to our children and as a hero for all.

"Pues adios, Willie, in guiya hao." In our Chamorro language, that means, good-bye, Willie, we love you.

Mr. ROHRABACHER. Mr. Speaker, I yield myself 11 minutes.

Mr. Speaker, today we mourn the life of seven heroes, the crew of the Space Shuttle *Columbia*: Rick Husband, William McCool, David Brown, Kalpana Chawla, Michael Anderson, Laurel Clark, and Ilan Ramon.

These heroes are now departed from us, and they find their place in the memory and the hearts of all Americans who are grateful to them and grateful to the others who have given their lives to make sure that our country and all humankind advances into this next frontier and conquers the next frontier of space. There are casualties in the conquest of every frontier, and this is no exception.

Just as our heroes of the past frontiers are remembered and honored by this country, we will, once the space frontier is conquered, look back on these pioneers, and we will remember them on the honor roll of heroes.

The *Columbia* reminds me a bit of another vessel, another American vessel from 200 years ago, the good ship *Columbia*. Americans were always known as the leaders in transportation, whether it was railroad transportation or, before that, ship transportation; and we had some of the mightiest and most impressive ships on the oceans and one of those ships was the good ship *Columbia*.

Americans were so proud of the good ship *Columbia* that one of our first patriotic songs dealt with our pride in that ship, and that song went as follows, and every American knew these

words and sang this song 150 years ago: "O, *Columbia*, the gem of the ocean, the home of the brave and the free, the shrine of each patriot's devotion, a world offers homage to thee."

And, yes, today our thoughts go to the crew of the *Columbia*, another magnificent vessel that charted unknown waters, carried Americans and, yes, carried the admiration of the entire world.

I think one of the things that I have gleaned from this tragedy is just how much the American people associated themselves and identified with America's space program. Yesterday, as we went to Texas, it was not so much the ceremony that I remember as it was the people of Texas and how they took this tragedy personally. As we rode in our congressional buses to and fro to that ceremony of remembrance and dedication at which the President spoke, the people of Texas lined the roads and the streets. Little children were waving American flags. People would rush out of their houses as we drove by with their flags and little signs of support and encouragement.

I believe that if there is anything we can be grateful for when *Columbia* went down, it went down over friendly territory. It went down over Texas, where the people of that State feel so strongly about the space program and about their country.

I am proud to say that my constituents and others in California have had a long association with the space program as well, and we are just as proud of the achievements. But, yesterday, it touched my heart that the people of Texas were reaching out to us and to the families.

The *Columbia* tragedy has not diminished the commitment of the people of Texas nor the commitment of the people of the United States towards space exploration and space utilization. Our space program must and will go forward because the American people remain as committed today as they were last week, and today we have seven heroes to give us inspiration.

The American people over the last few years have been lulled into a false sense of security about space travel. We always considered the astronauts our heroes. Children would come out to see astronauts, but most Americans felt that manned flight into space was far less risky than it really is. They have been lulled into this false sense of security because NASA has been doing one terrific job and our astronauts have been doing one terrific job and our aerospace industry has been doing one terrific job. But it is still the riskiest of propositions.

I was in the White House in 1986 when the *Challenger* blew up, and I will never forget that day. We did what? We regrouped, we found what was wrong, we found the flaws, and we moved forward after correcting those flaws. Since then, once again, the American people came to believe space travel was routine. Well, pioneering a new frontier is

never routine. The Space Shuttle *Columbia's* crew understood that. They knew the risks that they were taking.

Today we mourn; this week we mourn; but in the future we move on and up. Although we hope that the shuttle will fly again, this country is now committed to a space program, yes, that will remember the shuttle system and be grateful for how efficient and what a magnificent system it was, but we now know we must invest in the technology that will move us beyond our dependency on this now old system that should not be allowed to become even older and us rely on it even longer. But does that mean we will in some way diminish our commitment to space? I do not think so.

When we look back over the years of what the space program has meant to our lives, the benefits are beyond imagination.

I remember as a young boy that I was able to talk to my grandparents perhaps once a month. I did not come from a wealthy family. Those telephone calls were scratchy, and they were expensive. Young people did not have the same contact then as they do with their grandparents today. I think it was \$5 a minute back in those days when \$5 was enormous. Today, thanks to our investment in space, thanks to the space program, people can talk to their families who are in the far reaches of the world every day, and it is affordable, and it has increased the quality of life in our country dramatically in this level of caring between people because space has permitted us better communication between each other.

What about entertainment and television? We have now before us a plethora of options in which to take up our time because we have assets in space that are offering us communication skills that are not only used for entertainment but are used in the medical field to educate people in far-off countries how to conduct operations and also provide communications with schools throughout the world.

The GPS system is a navigational system, and it would be unthinkable for us to not use our space-based assets for navigation purposes, something that has saved countless lives in giving us precise navigation that has saved hundreds, if not thousands, of those seeking transportation.

And what about the weather and the fact that today we know when storms are coming? Again, thousands of lives have been saved because of our investment in space assets. We can predict where a hurricane will go or a tornado will strike, and we can prepare for it and save those lives, not to mention the billions of dollars saved by predicting weather trends in the industry of agriculture.

Mr. Speaker, what about our national security? It was our lead in space, indeed the space shuttle itself created the impression for the communists who led the Soviet Union that

they could not compete with us and broke down their will and eventually caused a disintegration of their power base in Russia, which has left the world a much safer place.

□ 1615

We have invested also in a defense system in space, a missile defense system that even today will permit us not to be so terrorized by a possibility of a government in North Korea that is developing nuclear weapons because we have assets in space that will permit us perhaps to defend ourselves against that potential threat. So we have invested in space, and also it has saved us billions and billions of dollars and thousands and thousands of lives. It was the space pioneers like those on the *Challenger* and on the shuttle that have already given us these tremendous benefits, but we have only scratched the surface of what space can do to uplift the condition of humankind.

No, we will not be deterred by this tragedy. We will instead correct the flaws where they have been found and move on. We will move on and we will move upward. Will we continue? Will we Americans continue to move forward? Will there be another "Good Ship *Columbia*" someday charting the unknown waters or the unknown skies? You bet there will be. We remember and we will be grateful in those days to the crew of this ship *Columbia* as we were to the pioneers of generations past.

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

Mr. LAMPSON. Mr. Speaker, I yield 2 minutes to the gentleman from Texas (Mr. FROST) in whose district the shuttle began to fall. I also ask unanimous consent that the gentleman from Texas (Mr. GREEN) control the balance of the time.

The SPEAKER pro tempore (Mr. MILLER of Florida). Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. FROST. I thank the gentleman for yielding me this time.

Mr. Speaker, I join with my colleagues in expressing this body's deep grief over the loss of *Columbia* and her brave crew. I was privileged to attend the memorial for our seven astronauts in Houston yesterday. The deeply moving words in honor of the *Columbia* revealed how profoundly this tragedy has affected people in Texas and across our country.

Today in my district in north Texas, one of those astronauts, Dr. Kalpana Chawla, is being remembered at her alma mater, the University of Texas at Arlington. K.C., as she was known by her friends at UTA, was a true pioneer and a role model for young people on two continents. K.C. was the first Indian American to travel into space and her achievements brought great pride to people in her home country of India and her adopted home in north Texas.

While aboard the *Columbia*, K.C. sent an e-mail to students in her hometown, Karnal, India. She wrote: "The path from dreams to success does exist. May you have the vision to find it, the courage to get onto it and the perseverance to follow it. Wishing you a great journey."

There can be no doubt that K.C. and the other astronauts aboard the *Columbia* had the vision and the perseverance to follow their dreams. Those dreams led them into space on a mission of discovery that made them heroes. As we reflect upon the lives of Dr. Chawla and her fellow crew members, we have a shared responsibility to forge ahead with their mission. After the House passes this worthy resolution honoring our fallen heroes, it will be our duty as Members of Congress to commit our government to a full investigation of the causes of this tragedy, and, just as importantly, to recommit America to our mission exploring the frontiers of space.

Mr. ROHRABACHER. Mr. Speaker, I yield 5 minutes to the gentleman from Florida (Mr. WELDON), who has spent so much time and effort since he has been in Congress on issues of space and has diligently worked as a member of the Subcommittee on Space and Aeronautics of the Committee on Science.

Mr. WELDON of Florida. Mr. Speaker, I thank the chairman for yielding me this time, and I thank him for his leadership on space policy issues.

Today I join with my colleagues on both sides of the aisle to honor the crew of *Columbia*. The names of these brave men and women will now forever be linked to the risks and rewards of exploring the final frontier. They were all extraordinary people.

Commander Rick Husband was a man of strong faith who had dreamed of space travel since his childhood in Amarillo, Texas. He was a family man. He was committed to his community. He set the highest standards for us all.

Pilot William McCool was a man who personified excellence in all that he did. He was from San Diego. Since an early age he had dreamed of flying and following his dream with an unending font of energy and skill. He was highly gifted, but evidently he rarely showed any hubris. In fact, he was described as always humble, something we all could learn from.

Mission Specialist Michael Anderson was from Pittsburgh, Pennsylvania. He loved learning and science, and it was in following his passion for science that led him to NASA and to space flight. He knew his responsibilities as an astronaut and took every opportunity to talk to schoolchildren with excitement and enthusiasm about the value of space exploration.

Mission Specialist Kalpana Chawla lived a uniquely American life. Born and raised in India, she came to America as an immigrant. She worked hard and studied engineering and science. She became an American citizen and from there became an astronaut. She

made both the nation of her birth, India, and her adopted country, America, proud of her and her accomplishments.

Mission Specialist David Brown was truly a man for all seasons. He was a physician like myself, a Navy pilot, and a member of the astronaut corps. Everything he set out to do, he accomplished. He had many other goals he was anxious to accomplish after this mission had been completed.

Mission Specialist Laurel Clark, a wife, a mother, a physician, also. She enjoyed scuba diving and flying airplanes. She was aware of that special honor that was hers to fly in space, and she was thankful for it. She was certainly somebody who lived life to the fullest.

The man, of course, who was in many ways of most interest was Payload Specialist Ilan Ramon. He was the first Israeli in space, a national hero in his homeland, a dedicated husband and father, a brave pilot, the son and grandson of Holocaust survivors. He was an inspiration to his nation and to us all.

Commander Husband, on the evening before they launched, shared with his crew and their families his favorite passage from the book of Joshua. I would like to share it with my colleagues today. It reads:

"Be strong and courageous, because you will lead these people to inherit the land I swore to their forefathers to give them. Be strong and courageous. Be careful to obey all the law my servant Moses gave you. Do not turn from it to the right or to the left, that you may be successful wherever you go. Do not let this book of the law depart from your mouth. Meditate on it day and night so that you may be careful to do everything written in it. Then you will prosper and be successful. Have I not commanded you? Be strong and courageous. Do not be terrified, do not be discouraged, for the Lord your God will be with you wherever you go."

As Commander Husband invoked those words of the Bible to encourage his crew to be strong and courageous, we today should take heed of those words. We live in a dangerous world with many challenges facing us. The measure of a truly great nation is one that can face its challenges and excel and lead the world to a higher level. That is why we have NASA and why we must recommit ourselves now more than ever to the dream and adventure of human space flight. The crew of *Columbia* would want nothing less. It was what they lived for. It was what they died for.

How we decide to respond to this tragedy will be judged very closely by many generations that come after us. We are a nation of explorers. We cannot let future generations down and walk away from our destiny in space. The *Columbia* Seven crew would best be memorialized by a great, strong, robust commitment to space exploration.

Mr. GREEN of Texas. Mr. Speaker, I first would like to thank my California

colleague for those kind words for Texans. Texans, as you noticed yesterday, did take the loss of the *Columbia* to our heart.

Mr. Speaker, I yield 1 minute to the gentleman from Maryland (Mr. CARDIN).

(Mr. CARDIN asked and was given permission to revise and extend his remarks.)

Mr. CARDIN. Mr. Speaker, in supporting this resolution, each of us expresses our deepest condolences to the families of our seven explorers, our seven astronauts, who lost their life this past Saturday. Each of us feels a connection to this tragedy.

Mr. Speaker, I have the honor of representing Annapolis, where the Naval Academy is located. Commander McCool graduated from the Naval Academy. The Naval Academy family misses their comrade. This morning I was with a health care group talking about health care issues. The *Columbia* mission was life sciences trying to find the answers to dread diseases here in the United States. Each of us was affected by this tragedy.

Six Americans, one Israeli lost their lives. America and Israel share in the loss of our heroes. In their honor, in their memory, we will continue our commitment to space and our commitment to understand what went wrong with the *Columbia* so that we can continue space travel for the benefit of future generations.

Mr. ROHRABACHER. Mr. Speaker, it is my honor to yield 5 minutes to the gentleman from Texas (Mr. BARTON) who has been deeply involved in technology issues during his long tenure here in Congress and a strong supporter of the space program.

(Mr. BARTON of Texas asked and was given permission to revise and extend his remarks.)

Mr. BARTON of Texas. Mr. Speaker, when we are little boys or little girls, people ask us, "What do you want to do when you grow up?"

Most of us say we want to do something, whatever our parents are doing, our mother or our father, or we maybe want to be a policeman or a fireman or a baseball star or a football star.

A lot of people say they want to be astronauts, because astronauts are heroes. When I was growing up in Texas, one of the things I thought about being was an astronaut. But there are so few that not many of us get to actually have that kind of a dream.

This past Saturday, six American citizens and one Israeli citizen who were living that dream found that it came to a crashing end when, upon reentry, *Columbia* Mission STS-107 came apart. We are here today to first of all pay tribute to those brave seven astronauts who gave their lives pursuing their dream but in a larger sense pursuing humanity's dream, to find new knowledge, to reach out into space, to reach out into the future.

I was one of the 40 or 50 Congressmen and Senators who went to Houston yesterday to participate in the memorial

ceremony. The gentleman from California (Mr. ROHRBACHER) was there, the gentleman from Texas (Mr. GREEN) was there, the gentleman from Texas (Mr. HALL) was there, some of the Members that are in the Chamber right now. When we got there, they took us up to the sixth floor of the administration building, and they put us in the briefing room that the administrator uses to be briefed on these missions.

Around the upper walls, they had a patch of every shuttle mission with a brief summary, from STS-1. They had not put this one up yet because it was not complete. And then down on boards they had the profiles for the missions for this year. They had STS-107 and they had, launch, January 16, the number of people in the mission, the seven astronauts and the payload and the number of orbits and how high it was going to be above the Earth, 150 nautical miles, and what its degrees of entry was when it came back, 39 degrees. That mission will never be completed in the physical sense.

□ 1630

But it could be completed in the historical sense if we as a Congress and we as a country carefully think about how to honor their memory and how to continue the work that they gave their lives for. A 2 percent accident rate is unacceptable. Even though it is an experimental program, we can not have a 2 percent risk that every time we put a shuttle up lives will be lost. So one of the things we have to do is conduct this investigation, if at all possible find the cause of the accident and prevent it, but we also have to begin to look at a substitute for the existing shuttle fleet.

I was on the committee in 1987 when we did the investigation, and we talked about going to new technology then, but we decided not to for two reasons, the cost and the fact that the existing shuttle fleet was still relatively young. That was 17 years ago. This time around I think we need, as a part of the investigation, to consider taking the next step, not using '50s and '60s and '70s technology. Let us use 2000 and 2005 technology.

We also need to reevaluate the mission of NASA. If our mission to have manned space activity is simply the space station, in my opinion that is not a sufficient mission. President Kennedy said in the early '60s, we will land an American on the moon by 1970. We did it in July of 1969. I would hope that we would take this opportunity to look at our mission. Perhaps we want to land a man on Mars by 2020. Perhaps we want to have a full-time colony on the moon by 2050. But we need to reevaluate the mission of NASA. We need to give our children and our grandchildren a vision for what America is all about, and in my opinion part of that vision is an aggressive space program with men and women in space carrying the American flag.

God bless our seven astronauts and their families, and God bless America.

Mr. GREEN of Texas. Mr. Speaker, I yield 2 minutes to the gentleman from Illinois (Mr. DAVIS).

Mr. DAVIS of Illinois. Mr. Speaker, I rise to express my condolences and those of my constituents to the families of the astronauts of the *Columbia*. I am reminded that no greater gift can one give than his or her life to advance the cause of humanity.

Michael Anderson and the other six courageous men and women aboard the *Columbia* knew the risks of space exploration, and yet they were willing to travel over 6 million miles to try to make the world a better place in which to live. Their 16-day science mission was an attempt to find answers to some of the questions we have about space and its possibilities.

They were gifted people, well-trained, courageous, ordinary people, daring to do extraordinary things. They were mothers, fathers, brothers, sisters, sons and daughters. They were inextricably bound by their zest and zeal to explore the stars and heavens in an attempt to move humankind forward. The candle of passion by which they lived must never go dim. It is the collective challenge of a grateful Nation to ensure that their lives and sacrifices were not in vain.

Today I, along with more than 100 of my colleagues, sent a letter to the Postmaster General, urging him to design a stamp that will memorialize the memory of the *Columbia* seven and fan the flame for our space program. This symbolic gesture is a small way of a grateful Nation saying thank you.

We will never forget the *Columbia* seven because they represented the best and the brightest of the world. To the families we say thank you for sharing your loved ones with us and may God continue to comfort you with love and memories of their lives and of their contributions.

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

Mr. GREEN of Texas. Mr. Speaker, I yield 3 minutes to the gentlewoman from Texas (Ms. JACKSON-LEE), my neighbor.

(Ms. JACKSON-LEE of Texas asked and was given permission to revise and extend her remarks.)

Ms. JACKSON-LEE of Texas. Mr. Speaker, I thank the distinguished gentleman from Texas (Mr. GREEN), and I also thank the gentleman from Texas (Mr. LAMPSON) and offer to his constituents my sincerest sympathy. We are neighbors in Texas, and we are friends. My District borders up against the Ninth Congressional District, and we have the opportunity as well to share our concern about NASA on the Subcommittee on Space and Aeronautics.

To the chairman, I thank him very much for his leadership and the comfort he gave us as he attended the memorial service yesterday, and I thank the gentleman from Texas (Mr. DELAY), the leader of the House, and the gentlewoman from California (Ms.

PELOSI), the minority leader, for giving us this opportunity to pay tribute and as well giving a tribute to these fine and wonderful heroes.

If I might, I think it is important to individually call their names on the floor of the House. So I call them with humbleness and honor. Rick Husband, commander; Kalpana Chawla, mission specialist; Laurel Clark, mission specialist; Ilan Ramon, payload specialist; William McCool, pilot; David Brown, mission specialist; and Michael Anderson, payload commander.

Each and every one of them, heroes and patriots, the seven astronauts whose lives were lost aboard the Space Shuttle *Columbia* were truly extraordinary people. To the world, these astronauts were valiant heroes. To those of us in Houston, they were also friends and neighbors. They were integral members of the community, and they paid the ultimate price to further a mission that benefitted all of humanity. To their families and friends and also to their neighbors and the community, they represented a very special group of people. To this Nation, they were extremely special.

And certainly we want to acknowledge the fact that this was an extremely diverse group of individuals. The courageous astronauts aboard the *Columbia* were individuals of the highest caliber, always striving for excellence, exemplifying the most noble of traits. They were skilled professionals, scientists, clinicians, adventurers, family men and women. The crew represented the diversity of our Nation. The crew even included a friend from Israel and a native daughter of India, the embodiment of the international goals of peace and cooperation. It is almost unbelievable that the Wright brothers set us on this pace and we have taken it further.

I join my colleagues and say we may have gone to the Moon, but we must go to Mars and continue to explore the universe. It was President Kennedy who in 1962 in Houston, our hometown, said these words: "This generation does not intend to founder in the backwash of the coming age of space. We mean to be a part of it. We mean to lead it. For the eyes of the world now look into space, to the moon and to the planets beyond, and we have vowed that we shall not see it governed by a hostile flag of conquest but by a banner of freedom and peace. We have vowed that we shall not see space filled with weapons of mass destruction but with instruments of knowledge and understanding."

It is extremely important to honor these very brave and wonderful souls, and that is why yesterday I joined and offered legislation to put forward a congressional gold medal for the seven patriots and seven heroes that have fallen, along with the gentleman from Texas (Mr. LAMPSON). It is in this way I hope that we will remember them,

and we will always pay tribute to these wonderful and outstanding heroes of our world.

Mr. Speaker, the seven astronauts whose lives were lost aboard the space shuttle *Columbia* were truly extraordinary people. To the world those astronauts were valiant heroes; to those of us in Houston, they were also friends, neighbors, and family. They were integral members of the community, and they paid the ultimate price to further a mission that benefited all of humanity. To their families and friends, and also to the Israeli and Indian communities who lost a native son and daughter, I send my most heart-felt sympathies and condolences.

The courageous astronauts aboard the *Columbia* were individuals of the highest caliber, always striving for excellence, and exemplifying the most noble of human traits. They were skilled professionals, scientists, clinicians, adventurers, and family men and women. The crew represented the diversity of our Nation. The crew even included a friend from Israel, and a native daughter of India the embodiment of the international goals of peace and cooperation.

It is almost unbelievable that less than one century after the Wright Brothers made that first 12-second flight over the sandy dunes of North Carolina, that our astronauts would be making excursions into space seem almost routine. But these excursions are anything but routine. Every moment from liftoff to touchdown, is a spectacular achievement of human intellect and determination.

The *Columbia* crew took great risks and made the ultimate sacrifice to further the mission of NASA. Why take such a risk? I believe President Kennedy said it well in 1962 in my hometown of Houston, when declaring his commitment to putting a man on the Moon by the end of that decade. He said,

"This generation does not intend to founder in the backwash of the coming age of space. We mean to be a part of it—we mean to lead it. For the eyes of the world now look into space, to the Moon and to the planets beyond, and we have vowed that we shall not see it governed by a hostile flag of conquest, but by a banner of freedom and peace. We have vowed that we shall not see space filled with weapons of mass destruction, but with instruments of knowledge and understanding."

I believe that President Kennedy would have been proud to see the fantastic progress of the program that he so inspired that day. Today, NASA provides insights into the origins, destiny, and wonder of the universe and is a source of dreams for young and old alike. It has pushed the envelope of human existence, and given us glimpses of the far reaches of the galaxy that truly take our breaths away.

The seven courageous explorers aboard the *Columbia* paid the ultimate price to improve our understanding of the universe, to advance our medical and engineering sciences, and to make the nation safer and more secure. Before the *Columbia* started its tragic descent, the shuttle crew completed some 80 scientific experiments. Much of their research data had already been relayed to Houston where it has added to the pool of scientific knowledge.

Beyond the technological benefits of space exploration, those courageous pioneers also inspired the youth of America in a way that only manned space missions can. The maj-

esty and adventure of seeing people traversing the heavens sparks the natural curiosity and imagination of young people. It nudges some toward science and math and pushes all to strive for excellence. Seeing a team, like that on the *Columbia*, working and playing together inspires young engineers, scientists, and all sorts of people who want to be part of something truly great and noble. That inspiration may well be the *Columbia*'s crew's most enduring impact on humanity.

The ultimate tribute to the fallen crew of the *Columbia* will be in ensuring that their vital mission goes on, with our full support. There will always be risks to that quest, but those risks will diminish over time, as the fruits of our labor in space continue to grow.

John F. Kennedy's words, stated when our space program was still in its infancy, still ring true today:

"Well, space is there, and we're going to climb it, and the moon and the planets are there, and new hopes for knowledge and peace are there. And, therefore, as we set sail we ask God's blessing on the most hazardous and dangerous and greatest adventure on which man has ever embarked."

The *Columbia* crew lost their lives on that greatest adventure. We will miss them.

A STATEMENT FROM THE ASTRONAUTS' FAMILIES

On January 16th we saw our loved ones launch into a brilliant, cloud-free sky. Their hearts were full of enthusiasm, pride in country, faith in their God and a willingness to accept risk in the pursuit of knowledge—knowledge that they might improve the quality of life for all mankind . . .

Although we grieve deeply, as do the families of Appollo I and Challenger before us, the bold exploration of space must go on. Once the root cause of this tragedy is found and corrected, the legacy of *Columbia* must carry on for the benefit of our children and yours.

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

Mr. GREEN of Texas. Mr. Speaker, I yield myself such time as I may consume.

(Mr. GREEN of Texas asked and was given permission to revise and extend his remarks.)

Mr. GREEN of Texas. Mr. Speaker, from the pioneering Mercury missions, to the Apollo voyages to the moon, to the construction of the revolutionary International Space Station, America's astronauts have boldly gone where no man has gone before. Our scientific understanding, quality of life, and ability to imagine a better future have been greatly increased by the brave men and women who volunteer and are selected for these difficult missions.

In my hometown of Houston, Space City, Texas, NASA's astronauts and employees are part of the family. They are our neighbors and friends, they help us educate and motivate our schoolchildren, they attend our churches with us, and they serve as role models in our community.

Since 1997, I have had the privilege of having NASA astronauts visit middle schools in my congressional district. These visits are meant to encourage students to take math and science classes and to consider our space program as a career opportunity. I have been fortunate to get to know Dr. Ellen Ochoa, the first Hispanic woman astronaut, Dr. Franklin Chang-Díaz, the most traveled astronaut in

NASA history and Dr. Danny Olivas, one of the newest astronauts. I believe that all students need to have access to roll models like Dr. Ochoa, Dr. Chang-Díaz, and Dr. Olivas.

Individuals who proudly brave the dangerous conditions of spaceflight in pursuit of technology and scientific research to improve life on earth deserve our highest respect. Along with our other heroes of space exploration Rick Husband, William McCool, Michael Anderson, Kalpana Chawla, David Brown, Laurel Clark, and Ilan Ramon will not be forgotten for making the ultimate sacrifice.

NASA and Congress will have to do the hard work and ask the hard questions to determine what went wrong and why from both on the shuttle itself, and within NASA's management and operations. Then we must take the required action and devote the required resources to improving the safety of our astronauts.

Improving safety may or may not require more money, but the NASA budget is extremely small within the federal budget. If safety funding needs to be bumped up, so be it, but it should not come at the expense of the other valuable activities at NASA.

I wish to express my deep respect for those brave men and women we lost this Saturday and to extend my heartfelt sympathy to their family, friends, and fellow astronauts. They have touched many in Houston, Texas, our Nation, and the world.

Mr. Speaker, I ask unanimous consent that the gentleman from Texas (Mr. HALL) control the balance of the time.

The SPEAKER pro tempore (Mr. MILLER of Florida). Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. GREEN of Texas. Mr. Speaker, I yield 2 minutes to the gentlewoman from California (Mrs. CAPPS).

Mrs. CAPPS. Mr. Speaker, I thank my colleague for yielding me this time; and I rise grateful for this opportunity today to speak on behalf of my own constituents, to give voice to their tears and their tributes to the seven astronauts we have lost.

While this is a blow to the entire Nation, I am especially mindful of the unspeakable loss suffered by those who know them best, especially the 12 children who lost their beloved mothers and fathers. The seven *Columbia* crew members had embarked on a journey of science and discovery so that we all might benefit from their experience. These men and women have made the ultimate sacrifice for our Nation.

Mr. Speaker, the U.S. space program has long flourished on California central coast, my home. Our region is home to Vandenberg Air Force Base and countless businesses and research centers that have benefited from and infused vitality into NASA's programs. In the name of the seven and in their memory who have given their lives for this pursuit, I pledge to do whatever I

can to help our space program recover from this terrible setback so that these important endeavors can continue.

Mr. Speaker, the Book of Isaiah teaches us that the righteous "shall mount up with wings as eagles." Our fallen heroes flew like eagles. They came very close to heaven before coming very close to home. May they forever rest in peace.

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

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

I am here, of course, to add my strong support for the resolution that is before us here today. I was at the Johnson Space Center yesterday in Houston for the memorial service, and I listened as the President offered a tribute to the crew of the space shuttle *Columbia*. I think he did a wonderful job of expressing the sentiments of all Americans, and it gave me a good feeling to be there. I felt good to be a part of the condolences to the families that were in attendance.

Today I am really pleased that the House of Representatives is pausing to recognize our debt as a Nation to the brave men and women who perished in the space shuttle. It is also fitting that this body offer our collective condolences to the families, which we did, and to the friends; and the President did a very good job of that. The astronaut in charge of the astronauts had something personal to say about each one of them. It was very fitting, and I know that I speak for all Members when I say that our thoughts and our prayers are with the families of these great American heroes. Their loss is a great loss to them. It is a personal loss to them as it is a great and tragic loss to our country.

We all watched with horror the tragic events of last Saturday unfolding. There will be time I think in the coming days to turn our attention to examining the evidence of the circumstances that led to this tragedy as well as the implications for America's space program. We have to do that. We have to look ahead. We have to go forward. That is necessary and important work, and the Congress will have to do it.

Today, however, I think should be a day for us to celebrate the lives of these heroes and to mourn their deaths. In that regard we must never forget that the shuttle astronauts were doing the important work of our space program. They were extending the frontiers of knowledge and working to benefit the lives of all of us through the important scientific research they were conducting on their flight.

Our Nation's achievements in space have been so impressive. We have taken it for granted. Their excellence almost put us to sleep as to the dangers that awaited the crews that we sent. We forget that their work was filled with risk. They often made it look easy and made it routine, but space exploration is still a dangerous

mission, astronauts or explorers who are willing to risk their lives to improve life back here on earth, and those are the Columbuses and the Magellans of space.

Mr. Speaker, at a time of tragedy words are usually inadequate to express the depths of our sorrow. The crew members of the space shuttle *Columbia* were very special men and women. They set a shining example for all of us in the way we ought to live our lives. We solute them, and we mourn their passing.

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

Mr. ROHRABACHER. Mr. Speaker, I yield 5 minutes to the gentleman from Indiana (Mr. PENCE), a young and vibrant Member of the House who has been very active in the last few years on technology issues.

(Mr. PENCE asked and was given permission to revise and extend his remarks.)

Mr. PENCE. Mr. Speaker, I rise today in strong support of this resolution expressing the condolences of the House of Representatives to the families of the crew members of the *Columbia* shuttle mission.

□ 1645

I have said on many occasions, Mr. Speaker, that the House of Representatives is the heart of our national government, and when the heart of America is grieving, it is all together fitting for us in this place on this blue carpet to grieve with our Nation.

It was my privilege yesterday to travel with some 50 colleagues of this Chamber, Mr. Speaker, to the Lyndon Johnson Space Center in Houston, Texas. It was a glorious day of extraordinary sadness. Our President and leaders from NASA gathered in that Texas sunshine to commemorate seven extraordinary souls, the heroes of STS-107, the *Columbia* shuttle. As I sat in the sunshine, my mind wandered back to just 18 months ago when, at 3 in the morning, accompanied by my beautiful wife, Karen, and the previous administrator of NASA, Daniel Goldin, we went into the processing facility at the Kennedy Space Center where the shuttles are prepared for their missions, and we walked just a few feet underneath those now infamous tiles and we stood under the belly of the *Columbia*, a ship that as one writer suggested yesterday should have been retired to the hallways of the Smithsonian Institution, the very first of its generation of spacecraft, now lost to human memory forever, above us. I stood in every sense, Mr. Speaker, beneath the *Columbia* as NASA personnel prepared it for its final voyage. And yesterday, at the Johnson Space Center, I stood again beneath the weight of a national tragedy, to mourn and pray with the families most affected by her loss.

It was my privilege on behalf of the people of eastern Indiana to join the President and leaders from the House and Senate for the *Columbia* memorial

service. We came to pay respects to the brave and inspiring crew of STS-107. We came to represent a national sense of loss. We came also, though, Mr. Speaker, to affirm the ongoing mission of the National Aeronautics and Space Administration to bring the Earth to the heavens and the heavens to the Earth.

The Bible tells us that without a vision, the people perish. And on occasion, our national government has lost its vision and we argue over that vision, but NASA has never lost its vision since those storied days of the 1950s and 1960s, to lead, with America, and her ingenuity, to lead with freedom and democracy into the unknown realms of space. And as the President said yesterday, and many have said on this floor today, that mission must and will go on.

The Psalms tell us that "the heavens declare the glory of God, the skies declare the work of his hands." But truthfully, this past Saturday morning, the heavens and the skies declared man's glory as well, the courage and ingenuity of NASA written large on the skies of the American south.

We will pray for these families who have suffered the loss. We will pray for their consolation, but we will also rededicate ourselves to the ongoing mission of America leading the world, as she ever has, with freedom and democracy into the vast expanse of space.

Mr. HALL. Mr. Speaker, I yield 2 minutes to the gentleman from Georgia (Mr. LEWIS).

Mr. LEWIS of Georgia. Mr. Speaker, I thank the gentleman from Texas (Mr. HALL) for yielding me this time.

Mr. Speaker, I rise today to honor and pay tribute to seven brave and courageous souls. The crew of the *Columbia* space shuttle were men and women of medicine and soldiers who chose science over war. They explored space to heal and not to kill. These astronauts were smart and tough.

In their quest for the stars, they embodied the hopes, the dreams, and the aspirations of all humankind. These seven individuals were determined, dedicated, and committed. In a real sense, they personified the best of humankind.

To honor their memory, we must continue to look beyond our little planet we call Earth. We must continue to soar to the heavens.

The *Columbia* crew was leading us into the future, and we will continue to follow them. They wished to serve, and they did. They served all humanity.

Today, this day, we mourn with their families, the families in America and in Israel. God bless the families of the astronauts, and God bless our little planet Earth.

Mr. ROHRABACHER. Mr. Speaker, I yield 4 minutes to the gentleman from Washington (Mr. NETHERCUTT), who has been an active member of the Subcommittee on Space and Aeronautics and very involved over the years in technology development for the United States.

Mr. NETHERCUTT. Mr. Speaker, I thank the distinguished gentleman from California for his kind introduction and for yielding me this time.

Mr. Speaker, I am pleased to rise to pay recognition today to particularly one of the members of the space shuttle who was lost last Saturday, February 1, knowing that America lost seven heroes, and one of those was from my hometown of Spokane, Washington.

Michael Anderson, the *Columbia* space shuttle's payload commander, grew up watching planes at Fairchild Air Force Base in Spokane and graduated from nearby Cheney High School. Even as a young man, his dreams were far off in the stars. He once said that he could not remember a time when he did not want to be an astronaut.

He followed his fine father into the Air Force and received his commission after graduating from the University of Washington in 1981. He was so proud of his service to his country and to wear his ROTC uniform around campus during a decade when that was not particularly popular, and his family and community have likewise been very proud of him.

During his distinguished service as a pilot, he earned a master's degree in physics from Creighton University, and he kept his dreams in the stars.

Finally, in 1998, he got to fly the mission he had been waiting for for nearly 20 years: his first flight into space was aboard the shuttle *Endeavor*.

I had the great privilege of meeting Michael Anderson in 1999 when he accepted my invitation to speak to students at schools around our hometown about the space program. The children were wide-eyed as they listened to his stories, and they laughed particularly hard at his story about trying to catch M&Ms in his mouth without the effects of gravity in space.

Michael had a warmth about him that moved those children, and his courage and service inspired those children to reach for their own dreams, be they in the stars or down here on Earth.

Michael's accomplishments, his courage, and his discipline are representative of the crew he flew with and a source of pride for our community.

His continued dedication to space and science tells us that after a full investigation we should continue to pursue human space flight. For Michael's sake and the sake of the other crew members, we must keep reaching for the stars, lest their sacrifice be in vain.

As Americans, this tragedy should teach us all that we must not treat space missions as routine. All astronauts are accomplished individuals willing to put themselves in danger for the sake of bettering humankind and advancing mankind's dream of space exploration. They are courageous, they are committed; and we owe them all a debt of thanks for their service, not just in times of tragedy, but every day.

At a time like this, it is natural to ask who is at fault and what happened. But I believe that this is not the time for fault-finding, for recrimination, and for blame. We must come together and support the families of these astronauts and unify to support the entire NASA family.

As we move forward, I have vast confidence in Administrator Sean O'Keefe, Deputy Administrator Fred Gregory, and Associate Administrator Bill Readdy. The public face of the shuttle program over the last few days, Ron Dittmore, also a native of my hometown of Spokane, has also stepped up in a time of crisis and has performed admirably. Mr. Speaker, the entire NASA team deserves our thanks for pulling together and demonstrating firm resolve to get to the bottom of this incident.

And as we consider what went wrong, we must also consider NASA's future. As a member of the Subcommittee on Space and Aeronautics, we know that this year we will pass a NASA authorization bill, a bill that even before this tragedy promised to be the most important measure since the start of the shuttle program.

We will evaluate the future of the shuttle fleet. We will weigh upgrades to the orbiters against the substantial investment required to make the next-generation reusable launch vehicle a reality. We will examine the appropriate balance for scientific investigation and engineering achievement. We will prioritize between observations of our own planet and a better understanding of our solar system and our universe.

But I am confident that at the end of the deliberations, we will conclude that human space flight must continue, because space continues to be the final frontier; and as long as we can look upward at night and be fascinated with the prospect of unknown worlds, human space flight will be part of our space program.

I believe that Michael Anderson would not have us choose otherwise.

Mr. HALL. Mr. Speaker, I yield 2 minutes to the gentleman from New Jersey (Mr. MENENDEZ), the chairman of the Democratic Caucus; and pending that, I ask unanimous consent that the gentleman from Texas (Mr. BELL) be permitted to control the balance of the time.

The SPEAKER pro tempore (Mr. MILLER of Florida). Is there objection to the request of the gentleman from Texas?

There was no objection.

(Mr. MENENDEZ asked and was given permission to revise and extend his remarks.)

Mr. MENENDEZ. Mr. Speaker, I thank the distinguished ranking member for yielding me this time.

As our country grieves for the tragic loss of the *Columbia* crew, we want their families to know that we are truly grateful for their sons and daughters, husbands and wives, fathers and mothers.

America is not alone in mourning the loss of the *Columbia* heroes. We are joined by the entire global community. No country understands our loss more than Israel and India for whom that loss is particularly acute, having first rejoiced as two of their own realized the dream of participating in the American space program only to have this joy turned into sorrow.

This great Nation was founded by those rare men and women who are willing to risk their lives in the name of exploration. The *Columbia* astronauts and their colleagues in the space program are our true explorers. So as our Nation mourns the loss of these seven heroes, we are united in our grief and sorrow and united in our determination to move forward in our exploration of space, and our experiments in space that will, undoubtedly, continue to improve our lives with new technologies and new medicines. The lives of these selfless pioneers were not lost in vain, and so we must reenergize our space program and make sure that Congress and the President fund NASA at levels that guarantee safety and progress.

When America ventures into space, we send more than just a shuttle; it is more than just a mission. We send our hopes and our dreams. The men and women who served on *Columbia* represented those hopes and dreams for all of us; and their bravery, their courage, their imagination has not died, and will never die. It lives on.

Mr. ROHRBACHER. Mr. Speaker, I yield 2 minutes to the gentlewoman from Florida (Ms. GINNY BROWN-WAITE), a freshman from Tampa who specializes in seniors issues, but is very concerned and very supportive of America's space program.

Ms. GINNY BROWN-WAITE of Florida. Mr. Speaker, I rise today to honor the seven *Columbia* astronauts the world lost this past weekend. They truly were the best and the brightest that the three countries, Israel, India, and the United States, the best and brightest that these three countries had to offer.

I was at home in my district on Saturday preparing to speak to some Girl Scouts who were earning their badge for voting; and when we learned what happened, we decided not to tell the girls in the audience. This was their day, and it was up to their parents to give them the very sad news.

□ 1700

As I was standing there speaking to the Girl Scouts, the entire *Columbia* crew was on my mind. As I looked out, speaking to the girls and interacting with them, I realized that one of them could be a future astronaut. I could not help but think how many of them, like these seven astronauts, dreamed of space travel as a child.

President Bush called the astronauts heroes. NASA administrators called them family members. Many children, including the ones I spoke to, as well as adults, called them role models.

Most Americans did not know the astronauts personally until we lost them, but in their loss we as a Nation can recognize the immense dedication by thousands of individuals worldwide to our space program. We can recognize the awe in which the program is held by the rest of the world and the enormous risks and sacrifices that accompany space travel.

As we grieve for the *Columbia* crew, it is important to remember that America is a Nation that has never shied away from new frontiers and exploration. We will continue to be a leader in space exploration, as the *Columbia* crew would have wanted. We will continue missions and experiments in space, as they, too, would have wanted. And, of course, we will continue to support a robust, cutting-edge space program that is the pride of this country and of the global community.

We will continue to remember and honor the seven *Columbia* crew members who died serving their countries, broadening the world's knowledge about the vast unknown we call space and doing what they truly loved to do.

Mr. BELL. Mr. Speaker, I yield 2 minutes to the gentleman from Virginia (Mr. MORAN).

Mr. MORAN of Virginia. Mr. Speaker, I rise today to pay tribute to the life of a hometown hero, Dr. David Brown from Arlington, Virginia. His abundant passion for life and fearless pursuit of the farthest frontiers of space will serve as an inspiration for generations to come.

A graduation of Yorktown High School in Arlington, David's educational path led him to the College of William and Mary, where he received his Bachelor of Science degree in biology. With an unquenchable thirst for knowledge and understanding of the world around him, David entered Eastern Virginia Medical School, earning his doctorate in 1982.

David then heeded the call to service of his country by joining the Navy. For over a decade, David was a highly respected flight surgeon and became the first of his rank selected for pilot training. Driven by his childhood dream to fly, David graduated first in his flight class. Over the course of his exemplary medical military career, he piloted A-60 Intruders, F-18 Hornets, and T-38 Talons.

Not content to remain constricted beneath the blanket of Earth's atmosphere, David continued venturing where many have dreamed but few have ever gone. His acceptance of an invitation to join NASA in April of 1996 began a dramatic new chapter in David's life. Stationed at Johnson Space Center in Texas and at Patuxent Naval Air Station in St. Mary's County, Maryland, he trained for 7 years in anticipation of what would be the greatest and final thrill of his daring and accomplished life.

On February 1, 2003, David Brown and the crew of the Space Shuttle *Columbia* were tragically lost during reentry.

But these brave souls in no way died in vain. Their memory will not be forgotten as space travel continues to break new boundaries in the exploration of the heavens.

Current astronauts and those of tomorrow are reminded of the risks they assume, but in that knowledge lies an ironclad certainty that this is a mission that must continue for the betterment of all mankind.

Mr. BELL. Mr. Speaker, I ask unanimous consent that the gentlewoman from Texas (Ms. JACKSON-LEE) control the balance of the time.

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

There was no objection.

Ms. JACKSON-LEE of Texas. Mr. Speaker, I yield 2 minutes to the distinguished gentleman from Wisconsin (Mr. KIND), who I know will want to pay tribute to a great citizen of his State.

Mr. KIND. Mr. Speaker, last Saturday our Nation lost seven American heroes. I rise today to offer condolences to the families and friends of the seven astronauts aboard the *Columbia* on its fateful mission, one of whom was Wisconsin' pride and joy, Laurel Clark, who was a graduate of Racine's William Horlick High School and a UW-Madison graduate.

We share the sympathies of all Americans for their dedication and bravery and service to our Nation. This tragedy does remind us, however, that space travel is anything but routine. It really is rocket science. When we work on the cutting edge of science and technology, perfection is never guaranteed and chance is always a factor, no matter how much time, money, or expertise is invested. That is why we owe a debt of gratitude that can never be repaid to those brave men and women involved in our space program for the risks they take to explore our last remaining frontier.

Last December, Mr. Speaker, I had the opportunity to visit Kennedy Space Center. I had a chance to meet with a lot of the scientists, engineers, and some of the astronauts on the shuttle missions. I walked away from that experience with a profound sense of appreciation, given the dedication and professionalism that our team, the NASA team, brings to their job every single day, and a greater appreciation of how terribly dangerous space travel still is yet today.

Some may wonder why we need to go to space. I believe we do it because we have no other option. Since our ancestors first inhabited this planet, we have always had a need to explore and know our surroundings. Whether it is hiking the next plain, climbing the next mountain, sailing the next ocean, or conquering the skies, human nature demands that we explore the next frontier. Space is the ultimate frontier, and the shuttle missions NASA undertakes help expand our base of knowledge for the benefit of all humanity.

As in past tragedies, we will learn from this one and we will go on. The NASA space program is the most advanced the world has ever seen, and our Nation's leadership in this area brings scientific benefits, opportunity, and hope to future generations.

The mystery of space brings unknown possibilities, and the instinct to explore represents the best of human nature and the American spirit. The seven astronauts we lost on February 1 were explorers, and our thoughts and prayers go out to them and their families.

Ms. JACKSON-LEE of Texas. Mr. Speaker, I yield 2 minutes to the distinguished gentleman from Texas (Mr. SANDLIN), the chief deputy whip, and also a Member of Congress whose congressional district has seen, as well, an enormous impact by the tragedy of the *Columbia* seven.

Mr. SANDLIN. Mr. Speaker, I thank my good friend, the gentlewoman from Texas, for yielding time to me.

Mr. Speaker, this weekend our Nation was shaken with the news of a terrible tragedy. After a 16-day mission into space, just 16 minutes from home, seven brave astronauts unexpectedly changed their course and returned to the heavens. In what was hoped to be a joyful day of homecoming, it became a day filled with grief as these brave explorers lost their lives 40 miles above the piney woods of east Texas.

Yesterday in Houston many of us said good-bye to the pioneers of our time who manned the Space Shuttle *Columbia*'s 28th mission. We expressed our condolences and sympathies to the families left at home, to NASA, to President Bush for the loss to our Nation, to Prime Minister Ariel Sharon of Israel and Prime Minister Atal Bihari Vajpayee of India. We all share a tremendous sense of loss.

Earlier Saturday morning, thousands of pieces of the Space Shuttle *Columbia* rained down in a rain of sorrow in parts of Texas and Louisiana. Miles and miles of debris scattered over east Texas, and over 1,000 pieces of wreckage blanketed Nacogdoches County in my district. County officials, first responders, and volunteers in Nacogdoches and surrounding counties quickly pulled together and deployed to identify and secure the remains of the *Columbia*, the physical reminder of the crushing loss of human life. These great Americans in east Texas became first responders for the entire Nation. They have done an incredible job, working night and day to locate every piece of evidence that might provide a critical link in determining the cause of this terrible tragedy. The entire country is proud of their work and commitment.

Additionally, the community at large has come together to pay its respects to these courageous explorers and the mission of the *Columbia*, respecting the hallowed ground they now share with these fallen soldiers of scientific discovery.

The *Columbia* seven were equipped with high ambitions and their mission of scientific research. These explorers, our modern-day Christopher Columboes and Lewis and Clarks, strove to break new ground to find answers to questions that have been impossible to find here on Earth. They devoted their mission to understanding prostate cancer, discovering new methods for refining gasoline, studying meteorological patterns, and experimenting with optical materials.

These seven brave humans wanted to leave the Earth a better place, and they have. In their honor, we vow not to abandon the goal to which they have dedicated their lives.

Throughout our history, we have risen to the call for progress in space exploration. Ever since Congress passed the National Aeronautics and Space Act in 1958 and subsequently President Kennedy called for man to walk on the moon, our Nation's eyes have been focused towards the stars. We will remain a nation of explorers and continue to push the limits of science and space discovery.

Few experience the glory of slipping the bonds of Earth and touching the face of God. The *Columbia* seven touched the face of God and then slipped into His embrace. They are true American heroes, not because they died, but because they lived. We value the contribution they made.

Mr. ROHRABACHER. Mr. Speaker, I yield 3 minutes to the gentleman from Wisconsin (Mr. SENSENBRENNER), the distinguished chairman of the Committee on the Judiciary and former chairman of the Subcommittee on Space and Aeronautics and chairman of the full Committee on Science.

Mr. SENSENBRENNER. I thank the gentleman from California for yielding time to me, Mr. Speaker.

Mr. Speaker, our Nation suffered a tragic loss on Saturday, when seven astronauts were killed in the shuttle *Columbia's* demise. We will long mourn that sad day and pray for the families of the astronauts. These men and women are true heroes who put their lives at risk for the betterment of mankind.

Today, we come together as a legislative body to remember these brave astronauts and to express our condolences to their families and friends. My thoughts and prayers and those of my family are with the loved ones of the international crew of the *Columbia*.

I can especially sympathize with the family of Dr. Laurel Clark, a Wisconsin native. A graduate of the University of Wisconsin, a loving mother and wife, and a first-time space voyager, Dr. Laurel Clark will be sorely missed.

In the coming weeks, as our shock and disbelief subside, many questions will emerge: How did this accident happen? Could it have been prevented? Should the space program continue in the face of tragedy?

Clearly, America must work to find the answers. I commend the men and

women of NASA for all that they have done in the aftermath of this tragedy. As we did 17 years ago after the *Challenger* accident, a thorough and timely investigation must be conducted to find any problems, fix them, and move on.

However, America must not let these events derail the progress that the space program has made and will continue to make. Already, NASA's research has unveiled numerous secrets about our planet and the universe beyond. Abandoning the space program would mean giving up on valuable research that could lead us to the discovery of cures for deadly diseases or other major scientific breakthroughs.

We must not abandon these goals and let these brave astronauts' deaths be in vain. Instead, we should keep their memories with us as we continue to explore the potential benefits that lie in space. After all, it was in pursuit of these noble goals that seven astronauts gave their lives last Saturday.

Ms. JACKSON-LEE of Texas. Mr. Speaker, I yield 2 minutes to the distinguished gentlewoman from Indiana (Ms. CARSON), a member of the Committee on Transportation and Infrastructure and a strong and committed supporter of NASA.

Ms. CARSON of Indiana. Mr. Speaker, I thank very much the distinguished gentlewoman from Texas (Ms. JACKSON-LEE) for yielding time to me, a person from whom I derive a great deal of wisdom and insight, particularly as it relates to the area of science and space. She represents her area very well in that regard.

Mr. Speaker, the loss of the crew of the Space Shuttle *Columbia* is a tragedy to their families and loved ones, as well as to the United States, Israel, India, and to the NASA family. Peoples around the world have expressed both support and condolences.

I felt a great deal of pride when I traveled around Indianapolis with Colonel Wolf, former astronaut. The kids were so excited about him. I know that he and his family and his father, who is a doctor at one of the hospitals in my district, join in commemoration of this incredible crew.

I speak on behalf of the people of the City of Indianapolis. The astronauts were people who lived and worshipped in our communities and who had families much like ours. They were united in learning and sharing to make the world a better place.

They were extraordinary people: Rick Husband; William McCool; Kalpana Chawla; David Brown; Ilan Ramon, payload specialist; and Michael Anderson. The true tribute to these brave seven scientists, Mr. Speaker, and explorers lives in the memory and pride of parents, siblings, and loved ones. They will also live on through their sacrifices to science and math education.

In my congressional district, students at the Decatur Township Lynwood Elementary School will learn

about these brave space explorers, the wonders of the universe, science, and mathematics at the EdVenture Lab. The EdVenture Lab at Lynwood Elementary School is the first in the Nation for grades kindergarten through fifth grade. It works in conjunction with the Challenger Center for Space Science Education using national and State standards.

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Adventure Lab is a multi-media rich environment which enables limited inquiry opportunities for all ages.

So let me close, Mr. Speaker, in saying in the Book of Ecclesiastes it talks about a time for all things, a time to be born and a time to die.

These scientists in the short time that they had on Earth were using their time very wisely for the benefits of all of us, and their sacrifices and contributions will live in the lives of this world forever.

Ms. JACKSON-LEE of Texas. Mr. Speaker, I yield 4 minutes to the distinguished gentleman from Washington (Mr. INSLEE), certainly an area that has a great deal of impact on the work of NASA and aviation in this Nation.

(Mr. INSLEE asked and was given permission to revise and extend his remarks.)

Mr. INSLEE. Mr. Speaker, America is all aware of the tragedy of our seven losses, but I would like to pay particular tribute to two American stories that bear repeating as we think about our loss.

First, I want to pay tribute to the very unique life of Dr. Kalpana Chawla, a woman who had such an incredible personal story that became now an American icon.

Dr. Chawla was born in India and raised in a small town called Karnal in the Punjab region. She at an early age decided to become associated with space, and she went to the University of Punjab and later received a degree from the University of Texas, and now has become a part of the tradition and story of American and international progress. She served both in the last space shuttle flight, the *Columbia*, and in 1997; and the world is proud of her. But what I want to say particularly is I think Dr. Chawla's story is one that can be embraced by America in the sense that we have been a magnet for people of incredible ambition and talent that have helped America lead the world in technology in a whole host of ways.

But this is also a story of success for India. India rightfully shares the privilege and honor of having raised and educated Dr. Chawla early in her life. And it is a story of success in my district where many people have come from India, have been educated in India, but who are now successful in developing software at Microsoft and other companies, are now providing medical services to our constituents and our families, are now designing aircraft at Boeing, and are part of the

American dream of keeping America on the cutting edge of technology.

So her heroism and success is a symbol both for the American commitment to continue growth but to success for other countries, and particularly India, in their ambitions. And we honor her and her family for her incredible contributions both to America and India and to the world.

Mr. Speaker, I also want to pay tribute particularly to Lieutenant Colonel Michael Anderson, who grew up in Spokane and has his picture in Cheney High School.

To Lieutenant Colonel Anderson's family, we simply say that we believe that he has a legacy of perhaps the highest accomplishment for any American; and he has inspired those who will come behind him in Cheney, Washington and in Washington and in America. We honor him.

Ms. JACKSON-LEE of Texas. Mr. Speaker, may I inquire if the distinguished gentleman from California (Mr. ROHRBACHER) has any more speakers.

Mr. ROHRBACHER. Mr. Speaker, we have no more speakers. I will be closing the discussion.

Ms. JACKSON-LEE of Texas. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, on behalf of my colleagues who have come to the floor today to support the resolution offered by the majority leader, the gentleman from Texas (Mr. DELAY), and the minority leader, the gentlewoman from California (Ms. PELOSI), who have come together to allow us to show our remorse, our sympathy, our concern in the great loss this Nation has experienced. We first want to thank them.

I want to also and would like to also thank NASA's Sean O'Keefe, the administrator, and all of the personnel that each day lay their commitment on the line so that this Nation might reach a very great future. To all of the staff persons at NASA and Johnson who mourned and who embraced in love those who were experiencing great suffering because of the tragedy, I thank them. To the scientists and researchers and contractors who were engaged in this work in and around Houston and throughout the Nation, we thank you.

To my colleagues, the gentleman from Texas (Mr. LAMPSON) and the rest of the congressional delegation of Texas who have been strong supporters, along with our colleagues across the Nation, we too thank you for understanding that without exploration in space, there is no hope. For where there is no vision, the people will perish.

This is not a time, Mr. Speaker, to dwell on criticisms. This is a time to say that we will find out the facts; and however the facts may fall, we will improve and correct and enhance NASA. We also want to thank NASA for the quick response, the quick announcing of an independent commission with Ad-

miral Gehman, and we also want to thank them for their openness to the American people and to the families.

For the critics who will say that everyone who spoke, from the President, to the administrator, to the chief of astronauts said that space exploration must continue, and to the religious communities, as well, that have prayed for us, the Grace Community Church that I worshipped in where Rick Husband and Mike Anderson worshipped, to Beth Yeshuron who acknowledged and memorialized Ilan Ramon with his family, to all of the various religions, the Hindu faith of which Kalpana Chawla was a member, and to the Indian community and to the American communities, we thank you.

So I close, Mr. Speaker, by giving words on behalf of the family, and as I read them I would ask that these words would be allowed to be included in the RECORD. It is a statement from the astronauts' families that was issued. The words are as follows and I believe they speak for themselves: "On January 16, we saw our loved ones launch into a brilliant cloud-free sky. Their hearts were full of enthusiasm, pride in country, faith in their god and a willingness to accept risk in the pursuit of knowledge. Knowledge that they might improve the quality of life for all mankind."

Although we grieve deeply, as do the families of *Apollo I* and *Challenger* before us, the bold exploration of space must go on. Once the root cause of this tragedy is found and corrected, the legacy of *Columbia* must carry on for the benefit of our children and yours."

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

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

Mr. Speaker, the conquests of the frontier and the development of new technology is how we have defined ourselves as Americans from the clipper ships to the railroads to heavier-than-air flight, which was, by the way, established only 100 years ago this year by two American bicycle shop owners. One hundred years of heavier-than-air flight, and now we are engaged in the conquest of outer space.

As man ascended into the air after the Wright Brothers successfully accomplished the first flight, many lives were lost in the historic task of creating the technology that now enables us to circumvent the world and has brought every person in the world together.

Now, as in the early stages of the engineering and development of technology that provided us with this conquest of the air, we are engaged in the development of engineering and technology that will move us into the heavens, into space. But there is a price to pay as America moves forward with technology and as America moves forward in the conquest of this last frontier.

Space pioneers, as those on the shuttles *Challenger* and *Columbia*, are those

who take the greatest risk and have paid the heaviest price. That is why they are heroes. They risk their lives to lift all of humankind. It was over 20 years ago in 1981 when I first worked with President Ronald Reagan on his remarks when he met the first astronauts off of a space shuttle to return from that very first shuttle flight back in 1981. There he was in the Mojave Desert waiting to welcome our astronauts from the first shuttle flight.

The shuttle had proved itself to be a historic accomplishment, an inspiration to the American people; and in those days we needed inspiration. It helped lift our spirits as we saw it ascend to space and then land in California. The first shuttle, of course, that shuttle that landed was the Space Shuttle *Columbia*. Over the years it did a tremendous service for our country and for the world, as did all those astronauts that used and were on the Space Shuttle *Columbia* and the other shuttles.

As we mourn the loss of our astronaut heroes today, let us pledge to keep moving forward in their memory. Let us pledge to move forward with confidence that some day just as there was a Good Ship *Columbia*, which was the *Columbia*, the gem of the ocean that gave us such pride, just as there was the Space Shuttle *Columbia* that lifted our spirits and has given us such pride over these last 20 years, there will again be a transportation system named after *Columbia*, perhaps after this *Columbia*. And it will inspire Americans and the whole world in the future as it will lift us to new heights and new accomplishments in the area of science and in the conquests of those frontiers that lie ahead.

As we move forward today, we mourn this loss. We ask that the families understand that the sacrifice that their family members, that these astronauts have made is deeply appreciated by all of us here in Congress, by all of the American people, and by all of the people throughout the world. They have done well by America. We are grateful that they have lived and given their lives for us, and now we will move forward as is the task of all generations of Americans.

Mr. EHLERS. Mr. Speaker, I rise in strong support of the resolution and to offer my heartfelt prayers on behalf of the families, friends and loved ones of the seven crew members who lost their lives aboard the Space Shuttle *Columbia*. Our whole nation mourns with them.

While this has been a terrible accident, it is important to note that this is only the third accident in the history of the United States space program to result in the loss of life. My home of Grand Rapids, Michigan, especially feels and understands the pain of this loss, as one of our native sons, Roger B. Chafee, was among the first Americans to lose their lives in the space program when the *Apollo 1* cabin was engulfed in a launch pad fire during testing in 1967.

Obviously, we do not have a full understanding of what happened last Saturday, but

I am certain that we, as a nation, will do everything we can to understand what went wrong. As we conduct this investigation, we must commit ourselves to the proposition that the cause of exploration in which these astronauts died will continue. I strongly urge my fellow Members of Congress and the nation as a whole that we must continue to develop our space science program. These missions serve several goals, including valuable scientific and technical research and fulfilling the call of humanity to explore and expand our knowledge.

For example, experiments conducted by the astronauts aboard *Columbia* will enhance our earthquake preparedness and safety, foster our efforts for cleaner air, and assist in strengthening human health. But, beyond the technical value of science in space, with each mission we are deepening our understanding of the conditions and effects of space on the human body. Each piece of knowledge is a stepping stone to further space exploration, enabling a fuller understanding of our universe and satisfying the call of stepping into the unknown.

This endeavor of exploration and discovery is the most appropriate way that we can honor the men and women that President Bush eulogized as "Seven lives of great purpose and achievement": Mission Commander Rick Husband; Pilot William McCool; Payload Commander Michael Anderson; Mission Specialists Kalpana Chawla, David Brown, and Laurel Clark; and Payload Specialist Ilan Ramon. May our continued dedication to the work they pursued with their lives be our most significant memorial.

Mr. CAMP. Mr. Speaker, Today, I rise to salute the seven astronauts who lost their lives aboard the Space Shuttle *Columbia*: Commander Rick Husband; Pilot William McCool; Mission Specialists Michael P. Anderson, David M. Brown, Kalpana Chawla, and Laurel Clark; and payload specialist Ilan Ramon, an Israeli.

On January 16, 2002, the *Columbia* left on a 16-day mission that was dedicated to research in physical, life, and space sciences, conducted in approximately 80 separate experiments, and comprised of hundreds of samples and test points. The men and women aboard the *Columbia* traveled over six million miles and labored 24 hours a day to complete this mission. On February 1, 2003, just minutes from completing its mission, the *Columbia* was lost during its reentry into the Earth's atmosphere. This loss was unexpected and terrible and today we remember not only this tragedy, but the seven heroes who were lost and their achievement.

For the families of the seven, we share your grief in this national tragedy. With heavy hearts we as a nation share in your sorrow and pride. My sincere condolences and prayers are with you in this time of great loss. America was blessed to have such men and women serving in the space program. While our space program has experienced tragedy before, it never becomes easy to bear. And today we grieve the loss of these heroes.

Though there are great risks involved in space travel, its benefits to life on earth has been tremendous. The heroes aboard the *Columbia* were fulfilling America's commitment of more than a half century to explore the universe. Their loss does nothing to diminish the great respect that Americans have in the space program. Despite this great loss, Amer-

ica will continue to send people into space. The dedication and professionalism of astronauts have impressed us for generations and the crew of the *Columbia* continued this tradition of brave men and women who have traveled into space to honor the American spirit of exploration. These astronauts are an example of everything that we consider honorable. Honoring them with this resolution is just one way we can pay tribute to their memory and accomplishments.

Mr. ORTIZ. Mr. Speaker, I offered my condolences to the families of the brave men and women who flew into the heavens, representing the Earth below them as well as any flight crew could. The mix of men and women, 6 Americans and an Israeli, reflected the international cooperation of the space program, and the diverse ethnic makeup of the United States.

I met Payload Commander Michael P. Anderson some time ago. I saw him in my office in 1999 when he and other astronauts were in my office to see me after his previous trip into space. They gave me a collage of pictures from aboard their spaceship, with an American flag and mission patch. This hangs in my office and I will always remember Commander Anderson—and the other astronauts who perished with him—as special, courageous patriots.

While the tragedy will again spark the debate over the need for human space flight, in this era of technological gains, the need is clear for humans in space. For this nation to be a power in space, we must continue to be in the forefront of human exploration of space. Americans are forever looking forward, dreaming of the stars. While we mourn the fallen astronauts, our nation looks forward at the new frontier of space.

All progress in the past 40 years has taken humans only as far as the moon and our first colony on the International Space Station. That is only the cusp of the exploration of our universe. Already, we have placed a rover on mars and the possibilities and wonders of space travel and exploration are endless. We don't do that for sport; the science conducted in space without the confines of gravity is simply amazing. Today we are enjoying the benefits of the scientific and technological advances space scientists have brought back to Earth over the past 40 years—from medical science to computer chips.

The research conducted aboard the spaceship *Columbia* was for the good of the entire human race. The small scientific steps they were taking for our nation, and the world, continue to be giant steps for mankind, the sort that propel us forward into new space and scientific frontiers. We must never take for granted the absolute danger of each trip into space. It's called a frontier for a reason: it is dangerous and unknown. Our astronauts all know that. They ride a rocket into space, fly among the stars, then re-enter our environment through the outer layer of atmosphere that literally burns at 3,000 degrees. That is an incredibly dangerous ride, each and every time a ship goes up. It is not 100 percent safe, nor are airplanes, yet we will continue to ride in them.

The *Columbia* crew was conducting experiments relating to communications, energy, health and medicine. These are all the areas we must continue to explore as our Earth grows smaller, our energy supplies dwindle,

and the cost of medicines spiral. Machines could not begin to conduct meticulous scientific experiments, particularly those on the human body. Only humans have the judgment necessary to explore space; we must not let our fear dictate our exploration of space.

There is no question, as long as there are brave men and women in America who dream of the stars and long to travel among them, we will have a strong, robust space program. We must continue to send brave astronauts into space, complete the International Space Station, and go further into this planetary system and galaxy in this century—and we will. We are will fulfilling the challenge issued by President Kennedy in exploring the frontier of space. We have thrown our cap over the wall of space, and we have no choice but to follow.

Lastly, let me express my concerns for citizens of East Texas traumatized not only by the streaking explosion above them, but also by the pieces of the shuttle falling from the sky around them. Texans have responded as Texans do—we pitch in and help. I am proud of the local response in the areas of Texas and Louisiana where the debris field stretches. Texans have stepped up to the plate to stand guard over pieces of debris simply because there are not enough NASA officials to guard or collect the tonnage of debris.

There is a certain symmetry in losing a space ship in the skies of Texas, the state that gave birth to the modern space program. Texas remains ever a part of the life and legacy of our space exploration. We remain dedicated to the memory of these brave men and women, and are working to find the clues to discover how this tragedy occurred.

America mourns our fallen heroes; and we will always reach for the stars in their memory.

I thank the leadership of the House of Representatives for sponsoring this resolution.

Mr. HASTINGS of Florida. Mr. Speaker, from the earliest of time, man has yearned to explore the unknown—to chart the distant stars. This unquenchable spirit to learn what is beyond the horizon, or over the next hill, is part of who we are. As Americans, this character is, more than anything, a defining part of us as a people. Indeed the America that we lovingly call home is far from the distant lands of most of our early roots.

From Lewis and Clark to the "iron horse" and the wagon train, the earliest quest for manned flight and, yes, even the first efforts to explore the heavens are celebrated mileposts on our journey for discovery. The Space Shuttle *Columbia* and the brave crew that she carried into space were, and is, part of this long voyage.

We have always known and accepted the risks associated with our most daring of efforts. This does not, however, lessen the deep pain in our heart or fill the empty void in our soul brought on by this tragedy. Space Shuttle flights were never without risks, though many had grown to view them that way.

Mr. Speaker, it is appropriate that this Congress, indeed, the nation and the world, honor and remember the members of this diverse and international space crew that was lost. We must express our deepest appreciation to them and their families for the sacrifice that they made for the advancement of humanity. For their mission was a noble one.

As a Floridian, the *Columbia* tragedy hits very close to home. Florida's east coast was where the crew trained and prepared for its

mission, and it was to be where they would be reunited with their families and friends after 16 days amongst the stars.

The Kennedy Space Center, located at Cape Canaveral, is no more than 90 minutes north of my Congressional District. On a clear day, my constituents can see the glow of the space shuttle as it launches toward the heavens. In some instances, some have even felt the Earth tremble beneath their feet as the *Columbia* and her sister ships departed Florida's east coast.

We will never forget Air Force Colonel Rick D. Husband, Navy Commander William "Willie" McCool, Air Force Lieutenant Colonel Michael P. Anderson, Navy Captain David M. Brown, Dr. Kalpana Chawla, Navy Commander (Captain-select) Laurel Blair Salton Clark, and Colonel, Israeli Air Force, Ilan Ramon. All will occupy a space on life's honor role for their selfless dedication to mankind.

On May 25, 1961, President John F. Kennedy stood before a nation immersed in a race to space with the former Soviet Union and declared, "I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to Earth." Barely eight years later, Americans from Florida to Honolulu and from Maine to California heard the famous words of Neil Armstrong as he became the first human being to step foot on the moon. "That's one small step for man, one giant leap for mankind."

Since then, well over 300 men and women from more than 25 countries have lived the dream for which so many of us have longed. That is, to see what our planet looks like from the heavens. Outer space is a place where the beauty of the blues and greens of the Earth overshadow the day-to-day difficulties facing Americans and others throughout the world. It is a place where uncertainty is accepted, but answers are always sought. It is a place that every child—male and female, tall and short, black, white, and brown—falls asleep, at least one night in their lives, fantasizing about what it would be like to see the Earth from a place amongst the stars.

These dreams and aspirations, as we all know, were not limited to American children. In Israel, Colonel Ramon's participation in *Columbia*'s mission was extremely special, as Ramon was Israel's first ever astronaut. Israelis watched Colonel Ramon's every move with great enthusiasm and anticipation. Updates on his mission and conversations with Israeli news personalities provided the Israeli community with a much-needed break from a never-ending conflict with the Palestinians. The tragic death of Colonel Ramon, however, means that no one will be returning to Israel to talk about what it was like in space, looking down at a world where violence and terrorism is not so obvious.

Here in America, Dr. Chawla, the first Indian-American astronaut, was another example of breaking down walls for minorities. Her participation in the mission sent a clear message to Indian-American children, and other minorities, that space travel can be a reality for all Americans—regardless of their ethnic background and color of their skin.

Realize, the studies that were being done by Dr. Chawla and others were to impact many of us here on Earth. Captain Anderson, the crew's only African American, was attempting to grow prostate cancer cells, a dis-

ease that disproportionately affects black males; Colonel Ramon was studying the effect that dust storms have on global warming; and Commander Clark, one of the crew's medical doctors, was examining how space affects the human body and the lives of other animals and organisms. It is under these studies and findings, as well as others currently underway in the International Space Center, with which the American space program must expand and grow.

In the coming days, months, and years, federal agencies, from NASA to NORAD, will investigate what happened during *Columbia*'s reentry. Their findings will make it safer for Americans and others to visit the heavens, but no investigation will ever replace our seven astronauts, our seven brothers and sisters that we lost last Saturday. And certainly no investigation will ever erase the glowing image of *Columbia* breaking up as it reentered the Earth's atmosphere. That image will forever be etched in our memory, much like those of the *Challenger* and the initial Apollo mission.

Whether it is increasing minority participation in the space program or reaching a new scientific discovery that will save the lives of thousands, the space program remains a vital ingredient in the America spirit of innovation. We have overcome the odds of the past, and are now face to face with the difficulties of the future.

Mr. Speaker, Socrates said in 500 B.C., "Man must rise above the Earth—to the top of the atmosphere and beyond—for only thus will he fully understand the world in which he lives." Every time that we travel amongst the stars, we learn more about the world of which Socrates so eloquently spoke. For it is a world in which we one day hope to live, and may the memories of those who perished on the *Columbia* last Saturday forever guide us on that path.

Ms. SOLIS. Mr. Speaker, on Saturday, our country suffered a staggering loss that reminds us how precious and fragile life truly is. As we watched the debris from the *Columbia* space shuttle fall to the ground, our hearts sank but our resolve only strengthened.

Seven astronauts; 15 educational degrees; more than 800 space hours traveled; working 24 hours a day for 16 days to perform over 80 separate experiments.

Although these numbers are impressive and show their intelligence and qualifications, they do not reflect the fullness of the lives of the crew of the *Columbia*. They do not show the courage that they so obviously possessed. These numbers do not show the love that they had for their families. They don't show their faith or passion for life. And the numbers don't show their dedication to a program that has consistently proved invaluable to our nation's commitment to exploration and has proved necessary for our advancement as a culture, a society and a people.

As we reflect today, I am especially moved by the story of Dr. Kalpana Chawla. Dr. Chawla was born in Karnal, India, a country that shares our nation's value for democracy and advancement of science. Dr. Chawla immigrated to the United States and was naturalized as a citizen before becoming an astronaut in 1994. Never afraid of chances, Dr. Chawla valued the pursuit of knowledge, a priority for all of the crew of the *Columbia*.

On this day of remembrance, my thoughts and prayers are with the many families that

lost their loved ones. These brave men and women gave their lives so that our innovative spirit can live on. It is with great gratitude that we acknowledge their sacrifice.

As we remember the *Columbia* and her courageous crew, I stand committed to the NASA program and the spirit of exploration and the pursuit of knowledge that these astronauts exemplified.

Mr. HOLT. Mr. Speaker, I rise today in recognition of the seven astronauts who tragically lost their lives in the space shuttle *Columbia* disaster on Saturday. The crew of the *Columbia*, Rick Husband, William McCool, Michael Anderson, David Brown, Kalpana Chawla, Laurel Blair Salton Clark, and Ilan Ramon lost their lives while on a mission for all of mankind. By exploring, learning, and pushing the boundaries of human understanding, they were providing a service to us all. These men and women were more than astronauts; they were heroes.

Astronauts are the modern expression of our pioneer spirit. Just as Lewis and Clark risked their lives two hundred years ago to explore the uncharted lands of the American West, our astronauts are twenty-first century pioneers who put their lives in danger to explore the vast expanse that lies beyond earth's frontier—space. The journey into space, however, is not exclusively an American effort. As we have learned by the outpouring of sympathy from around the globe, space exploration is an effort that knows no national borders. *Columbia*'s international crew was also a testament to this fact and today our hearts and prayers are with our close friends and allies in India and Israel, as they mourn the loss of astronauts Kalpana Chawla and Ilan Roman.

Columbia's crew carried with them the dreams and hopes for our future; dreams that the research they conducted on protein crystals could someday help develop new life-saving drugs; dreams that a combustion experiment could help reduce pollutants in earth's atmosphere; and dreams that work done on prostate cancer tissue might someday lead to a cure. We must not let these dreams die with them. We must continue to push the boundaries of scientific exploration both in space and here on the earth.

In the aftermath of this tragedy many have tried to quantify the benefits of the manned space program. But most are not quantifiable. How do you measure the sense of earth's fragility and unity inspired by those early pictures of earth from outer space? How do you measure the significance in human history of stepping on the moon? How do you measure the inspiration that man's expeditious into space have given to generations of school children around the world?

As we try to understand what caused the *Columbia* tragedy and as we agonize over what we might have done to prevent it, we must not lose sight of the larger meaning of the space program. Our endeavor into space has always represented the power of the American belief in the possible, in the potential of humanity to achieve what seems unachievable. The loss of the *Columbia* should not put our faith in our potential into question because no endeavor worth undertaking is without risk or sacrifice.

Mr. MARKEY. Mr. Speaker, I rise in support of the resolution.

How many of us when we were young dreamed of being an astronaut, to be one of

those brave humans who left the Earth to explore the mysteries of space? The seven heroic men and women we remember today, Rick Husband, David Brown, Michael Anderson, Laurel Blair Salton Clark, Kalpana Chawla, Ilan Ramon and Willie McCool, lived the dream.

They came from around the world and from every background to work together for the furtherance of mankind's quest of knowledge. These astronauts were on a mission of science, one designed to expand our knowledge of fire, reproduction, construction techniques, prostate cancer, improved crop yields, better drugs, and astronaut health as well as studying the Sun, the Earth, and space by conducting nearly 60 different experiments during their 16-day mission.

While we mourn their sudden loss, we must also prepare to use the knowledge gained both during their mission and from their tragic deaths to help those here on Earth and to prevent such accidents in the future.

Hopefully, last weekend's tragic events will mark not the end of the Space Program, but a new beginning. We will go through a process of investigation, self-examination, and reflection about what happened. But out of that process hopefully will emerge a strengthened U.S. and international space program. We will rededicate our selves and our nation to achieving NASA's mission of advancing the state of human knowledge about outer space, our solar system, and our universe. As the same time, as we continue to explore space, we must determine as best we can the cause of last week's disaster, so that we can make the changes and reforms needed to ensure astronaut and mission safety in the future.

Finally, I would like to extend my sympathies to the families and friends of the seven astronauts. The thoughts and prayers of a grateful nation are with you at this very difficult time. Your loved ones did not die in vain. They died doing something that they loved, but they also died doing something aimed at advancing the frontiers of human knowledge.

Mr. CRANE. Mr. Speaker, on February 1, 2003, we lost seven of mankind's finest. The crew of the Space Shuttle *Columbia* made the ultimate sacrifice, not in a feat of arms, but in the noble quest to expand human knowledge. My deepest thoughts and prayers go to the families of those brave men and women lost in this accident. Their loved ones will be remembered with deep gratitude and admiration for their dedication towards advancing our understanding of new frontiers and discovering ways science can improve our lives.

While space shuttles fly regularly, space travel itself is anything but routine. Its dangers are many but the *Columbia's* crew was willing to brave them. We in Congress have a duty to them and our astronauts to find the cause of this horrific accident. We can never fully eliminate the danger, but we can manage the risk. I realize that the NASA family is grieving—and they too have my sympathy—but even as we grieve Congress must be willing to ask serious questions about the shuttle program and our nation's goals for the space program.

Can NASA implement the space program's goals with only 3 shuttles, and if not what next? Should a seventh orbiter be built from scratch, or should the *Enterprise* be rebuilt? If the space program can get by with just three shuttles should a new vehicle program be implemented? Five years lapsed between *Chal-*

lenger's loss and *Endeavour's* first mission. Could a successor program vehicle enter service in the same amount of time that it will take to bring the shuttle fleet back up to four?

Columbia was destroyed on its 28th mission. *Discovery's* next mission will be its 31st. How many more missions does it have left in it?

Then there's the International Space Station. If a shuttle is damaged prior to re-entry how much assistance could it give? Could emergency facilities be added? Will having a smaller fleet further delay it in becoming fully operational?

Finally where does our space program go from here? Will we continue the trend in manned flight by going no further than low Earth orbit or will humanity again push out beyond our planet and return to the Moon or even go to Mars?

I am confident that NASA and Congress will address these questions. As America's space program continues into the future, we have a responsibility to provide it direction. I believe that the space program will continue to benefit humanity, and we in Congress must do all we can to ensure the safety of our astronauts when they embark on future missions.

Seventeen years ago President Reagan consoled our nation after another group of seven heroes were lost to us in similar, tragic fashion. He ended his remarks by briefly quoting from the poem by an American pilot, John Gillespie Magee Jr., who died in flight. Magee's stirring words are a fitting tribute to those who strive to explore and live in the heavens.

Oh! I have slipped the surly bonds of Earth
And danced the skies on laughter-silvered wings,
Sunward I've climbed and joined the tumbling mirth
Of sun-split clouds—and done a hundred things
You have not dreamed of—wheeled and soared and swung
High in the sunlit silence. Hov'ring there,
I've chased the shouting wind along, and flung
My eager craft through footless halls of air.
Up, up the long, delirious burning blue
I've topped the wind-swept heights with easy grace
Where never lark, or even eagle flew.
And, while silent lifting mind I've trod
The high untrespassed sanctity of space,
Put out my hand, and touched the face of God.

When asked by his brother about what would happen if something went wrong Captain David Brown, a member of *Columbia's* final crew, replied "this program will go on." He was right but it will not just be this one program that goes on. No matter what setbacks confront us humanity will explore the unknown, brave its dangers and continue our drive to create a better world.

Mr. CALVERT. Mr. Speaker, this past Saturday a tragedy occurred that touched every one of us. We lost seven brave explorers and now grieve along with their friends and family.

In our modern world, we have grown comfortable with the frequent occurrence of space travel, forgetting that with each mission, there is risk. The men and women of *Columbia* knew the risks, and in the name of discovery accepted them.

We owe each one of these brave voyagers a great deal of gratitude and reverence.

As a country we hold life and freedom as our highest values, and it is natural for us to

question the meaning behind the *Columbia* mission to determine whether it was worth the loss we feel now. One of the ironies of such a tragedy is that the valuable work these men and women were doing is now on the front pages of every newspaper and in the headlines of our evening news programs. If the mission had been completed as scheduled, there would have been perhaps a column on the back page of the newspaper or a 30 second newsbyte. Outside of the space community, few people are aware of the extraordinary advances being made in the fields of medicine, agriculture, physical and biological science by our space programs.

Our missions into space will continue to hold a measure of risk and I believe we should support these missions in every way possible. Our country has had a tradition of leading the way in exploration in every field, and that tradition should continue. The exploration of space will go on in the name of these seven fine men and women and in the name of all those who went before them.

On January 16 seven astronauts journeyed out of this world and they would go farther than anyone of us imagined; into the greatest unknown. However, their journey is not over and their legacy will never be forgotten God Bless.

Mr. EVERETT. Mr. Speaker, I join with the whole nation and the world in mourning the loss of the seven-member crew of the space shuttle *Columbia* (STS-107).

My condolences go out to the families of Commander Rick Husband, Pilot William McCool, Mission Specialists David Brown, Kalpana Chawla, Michael Anderson, Laura Clark, and Payload Specialist Ilan Ramon.

The flight of STS-107, seen as routine by many at its beginning, ended in tragedy on February first with the loss of the crew upon *Columbia's* re-entry in the earth's atmosphere as the shuttle was headed for home.

All loss of life is tragic, but it is especially painful when those who represent our best and brightest are suddenly take from us. The crew of *Columbia* gave their lives doing what they loved most—pushing back the boundaries of the unknown while striving to better all humankind. For certain, their mission was not in vain.

America is not finished with space. Indeed, our exploration beyond the veil of our home planet has only just begun. We owe it to the crew of *Columbia*, *Challenger*, *Apollo 1*, and all those who despite the risks dared to dream, to continue the beneficial programs of space exploration and experimentation.

We live in an age when the ego and excess of pampered athletes and pop idols underservedly garner the lion's share of national attention. Yet there are plenty of suitable role models for America's youth. Those who wear the uniform of this great Nation in far away lands or while orbiting hundreds of miles above our earth are "real" heroes.

Those who rushed the cockpit of United Airlines Flight 93 to save our Nation's Capitol from certain terrorist destruction are heroes, as are the tireless firefighters and emergency workers who labored in the wake of 9/11 to save lives and inspire our land.

Today we say farewell to seven more heroes—the men and women of space shuttle *Columbia*. Their contributions and sacrifice will never be forgotten.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, human space exploration is inherently risky. Distance, speed and an environment that can not support human life combine to make human space flights particularly precarious.

Unfortunately the world has new evidence of the dangers associated with space exploration. Millions watched as images of a singular, brilliant point of light in the sky became two, three, and four points of light as space shuttle *Columbia* broke apart over my home State of Texas.

I join the rest of the country and the world in mourning the seven brave astronauts whom we lost in this national tragedy. The outpouring of sympathy from the citizens of the world is recognition that the crew heroically put their lives on the line in the name of science and research.

More than a decade ago, January 28th, 1986, our country's space program was dealt another tragedy as we lost the crew of the space shuttle *Challenger*. The findings of the "Report of the Presidential Commission on the Space Shuttle *Challenger* Accident" (referred to as the Rogers' Commission Report) have changed NASA procedures to make human space flight safe. It is incumbent upon the federal government to conduct a vigorous and comprehensive investigation to uncover and alleviate the events that led to *Columbia's* accident. I pledge to do what I can to help our space program recover from this terrible setback so these important endeavors can flourish in the future. As a Senior member of the Science Committee, I will work closely with my House colleagues to assist NASA and Harold Gehman Jr. who will lead the special investigative commission.

I am the ranking member of the Science Subcommittee on Basic Research. In this important capacity, I have taken a major leadership role regarding America's commitment to technological development and scientific research and application. As such, I am a firm believer that the United States will continue our space program that has accomplished so much in the areas of research and science. This important and beneficial program is essential to advancing technology.

Specific technological advances made possible by space research include the arteriosclerosis detection, ultrasound scanners, automatic insulin pump, portable x-ray device, invisible braces, dental arch wire, palate surgery technology, clean room apparel, implantable heart aid, MRI, bone analyzer, and cataract surgery tools.

The Space Shuttle Program has yielded many lifesaving medical tests, accessibility advances for the physically challenged, and products that make our lives more safe and enjoyable. Such as:

Digital Imaging Breast Biopsy System—The LORAD Stereo Guide Breast Biopsy system incorporates advanced Charge Coupled Devices (CCDs) as part of a digital camera system. The resulting device images breast tissue more clearly and efficiently. Known as stereotactic large-core needle biopsy, this non-surgical system developed with Space Telescope Technology is less traumatic and greatly reduces the pain, scarring, radiation exposure, time, and costs associated with invasive surgical biopsies.

Breast Cancer Detection—A solar cell sensor is positioned directly beneath x-ray film,

and determines exactly when film has received sufficient radiation and has been exposed to optimum density. Associated electronic equipment then sends a signal to cut off the x-ray source. Reduction of mammography x-ray exposure reduces radiation hazard and doubles the number of patient exams per machine.

Laser Angioplasty—Laser angioplasty with a "cool" type of laser, called an excimer laser, does not damage blood vessel walls and offers precise non-surgical cleaning of clogged arteries with extraordinary precision and fewer complications than in balloon angioplasty.

Blood Serum Research—An astronaut's body, once free of gravity's pull, experiences a redistribution of body fluids that can lead to a decrease in the number of red blood cells and produce a form of space anemia. Monitoring and evaluating blood serum was required to understand these phenomena. However, existing blood-analysis technology required the use of a centrifugation technology that was not practical in space. NASA developed new technologies for the collection and real-time analysis of blood as well as other bodily fluids without the need for centrifugation.

Ultrasound Skin Damage Assessment—Advanced instrument using NASA ultrasound technology enables immediate assessment of burn damage depth, improving patient treatment, and may save lives in serious burn cases.

Lifesaving Light—Special lighting technology developed for plant-growth experiments on Space Shuttle missions is now used to treat brain tumors in children. Doctors at the Medical College of Wisconsin in Milwaukee use light-emitting diodes in a treatment called photodynamic therapy, a form of chemotherapy, to kill cancerous tumors.

Human Tissue Stimulator—Employing NASA satellite technology, the device is implanted in the body to help patient control chronic pain and involuntary motion disorders through electrical stimulation of targeted nerve centers or particular areas of the brain.

3-D Biotechnology—Developed for Space Shuttle medical research, a rotating cell-culture device simulates the microgravity of space. This allows researchers to grow cells in three dimensions. The device may one day help researchers find cures for dangerous infectious diseases and offer alternatives to patients who need organ transplant surgery.

Cool Suit—Custom-made suit derived from space suits circulates coolant through tubes to lower patient's body temperature, producing dramatic improvement of symptoms of multiple sclerosis, cerebral palsy, spina bifida and other conditions.

Programmable Pacemaker—Incorporating multiple NASA technologies, the system consists of the implant and a physician's computer console containing the programming and a data printer. Communicates through wireless telemetry signals.

Ocular Screening—NASA image processing techniques are used to detect eye problems in very young children. An electronic flash from a 35-millimeter camera sends light into the child's eyes, and a photorefractor analyzes the retinal reflexes, producing an image of each eye.

Automated Urinalysis—NASA fluid dynamics studies helped development of system that automatically extracts and transfers sediment

from urine sample to an analyzer microscope, replacing the manual centrifuge method.

Medical Gas Analyzer—Astronaut-monitoring technology used to develop system to monitor operating rooms for analysis of anesthetic gasses and measurement of oxygen, carbon dioxide, and nitrogen concentrations to assure proper breathing environment for surgery patients.

Voice-Controlled Wheelchair—NASA tele-operator and robot technology used to develop chair and manipulator that respond to 35 one-word voice commands utilizing a minicomputer to help patient perform daily tasks, like picking up packages, opening doors, and turning on appliances.

Land Mine Removal—The same rocket fuel that helps launch the Space Shuttle is now being used to save lives—by destroying land mines. A flare device, using leftover fuel donated by NASA, is placed next to the uncovered land mine and is ignited from a safe distance using a battery-triggered electric match. The explosive burns away, disabling the mine and rendering it harmless.

Rescue 911—Rescue squads have a new extrication tool to help remove accident victims from wrecked vehicles. The hand-held device requires no auxiliary power systems or cumbersome hoses and is 70 percent cheaper than previous rescue equipment. The cutter uses a miniature version of the explosive charges that separate devices on the Space Shuttle.

Byte Out of Crime—Image-processing technology used to analyze Space Shuttle launch videos and to study meteorological images also helps law enforcement agencies improve crime-solving videos. The technology removes defects due to image jitter, image rotation and image zoom in video sequences. The technology also may be useful for medical imaging, scientific applications and home video.

Product Labeling—NASA needs to identify, track, and keep records on each of the thousands of heat-shield tiles on the Space Shuttle. This required a labeling system that could be put on ceramic material and withstand the rigors of space travel to be readable after a flight. NASA developed high data-density, two-dimensional, machine-readable symbol technology used to mark individual tiles. This novel method of labeling products with invisible and virtually indestructible markings can be used on electronic parts, pharmaceuticals and livestock—in fact on just about anything.

Keep Cool Under Fire—Materials from the Space Shuttle thermal protection system are used on NASCAR racing cars to protect drivers from the extreme heat generated by the engines. This same material is also used to protect firefighters.

Fire Resistant Foam—A unique foam developed for Space Shuttle thermal insulation and packing is now being used as thermal and acoustical insulation in aerospace, marine and industrial products. Since it's also fire resistant, it's being used as well for fire barriers, packaging and other applications requiring either high-temperature or very low-temperature insulation in critical environments. For example, use of these foam products by airframe manufacturers such as Boeing, Lockheed-Martin, and Airbus provides major weight savings, while retaining good thermal and acoustical properties in the various products.

Fire Sighting—A sensitive, gas infrared camera, used by NASA observers to monitor

the blazing plumes from the Space Shuttle's solid rocket boosters is also capable of scanning for fires. Firefighters use this hand-held camera to pinpoint the hotspots of wildfires that rage out of control. Gem Jewelers no longer have to worry about inhaling dangerous asbestos fibers from the blocks they use as soldering bases. Space Shuttle heat-shield tiles offer jewelers a safer soldering base with temperature resistance far beyond the 1,400 degrees Fahrenheit generated by the jeweler's torch.

Jet Stripping—NASA developed a tool that uses powerful jet streams of water to strip paint and primer from the Space Shuttle's solid rocket boosters. A commercial version of this water jet is now used to treat turbine-engine components, airframe components, large aerospace hardware, ships and other mechanical devices, using only pure water. No hazardous chemicals are needed.

Quick Fit Fasteners—Fastening items in space is a difficult task. A Virginia company developed a fastener that can be pushed on, rather than turned. These quick-connect fasteners are flexible and strong, and have been used by NASA astronauts since 1989. The product is now in use by firefighters and nuclear power-plant repair technicians, and has other commercial applications.

Computer Joysticks—Computer games can now be played with all the precision and sensitivity needed for a safe and soft Space Shuttle touchdown. A game-controlling joystick for personal computer-based entertainment systems was modeled after controls used in shuttle simulators. Astronauts used the joystick to practice runway landings and orbit maneuvering.

Toys For Tots—Already successful with its Nerf toy products, Hasbro, Inc. wanted to design a toy glider that a child could fly. Benefiting from NASA wind-tunnel and aerodynamic expertise used in the Space Shuttle program, Hasbro improved the flying distances and loop-to-loop stunts of its toy gliders.

As witnessed, the Space Shuttle can be configured to carry many different types of equipment, spacecraft and scientific experiments. The Space Shuttle is essential in the assembly of the International Space Station (advancing life sciences & technology through long-duration missions) and repairing and servicing the Hubble Space Telescope (enabling many new discoveries in Space Science). As an enabling function, the Space Shuttle is fully engaged in providing services for earth and physical science research. The Space Shuttle also engages the private sector in the development of space by providing flight opportunities for industry, academia and government to conduct applied research relevant to NASA's mission through access to the space environment. I will foresee that cooperative activities with the National Institutes of Health (NIH), the National Science Foundation (NSF), the Department of Defense (DoD) and other U.S. agencies will continue to advance knowledge of health, medicine, science and technology.

STS-107, which was lost on February 1, 2003, was a 16-day mission dedicated to research in physical, life, and space sciences, conducted in approximately 80 separate experiments, comprised of hundreds of samples and test points. With two Americans and a Russian still stationed at the International Space Station, it is imperative that this pro-

gram not come to a halt. This most unfortunate and tragic loss of five men and two women, representing a mosaic of races and nationalities, will be mourned and these great American heroes will not be forgotten.

Mr. FALEOMAVAEGA. Mr. Speaker, I rise today to pay tribute to the late crew of the space shuttle *Columbia*. Like many of my colleagues, I had the privilege of traveling yesterday to the NASA Johnson Space Center in Houston, Texas to attend a memorial service for the seven heroes we lost on February 1, 2003.

On behalf of the people of American Samoa, I now express American Samoa's deepest condolences in this time of national tragedy. As the Governor of American Samoa noted in his general memorandum issued on February 3, 2003, American Samoa shares a special relationship with the U.S. space program. Five *Apollo* missions had splashdown landings near American Samoa. For four of those landings, American Samoa was also the first landfall for our nation's astronauts.

Like Americans everywhere, we grieve for the lost crew of the space shuttle *Columbia*. We also grieve for the families they left behind. Although our astronauts did not make it back to earth, we join with President Bush in praying that they made it safely home. That their sacrifice may not have been in vain, the United States of America will remain committed to space exploration and we will also fully investigate the cause of Saturday's accident.

Once again, and on behalf of the people of American Samoa, I extend my deepest condolences and heart-felt sympathy of the families and friends of our lost crew. I also pay special tribute and offer my personal condolences to the good people of Israel. The thoughts and prayers of American Samoa are with you. In this time of national and international mourning, may we find peace and may God bless America.

Mrs. JONES of Ohio. Mr. Speaker, I rise today to express my condolences to the families of the crewmembers of the *Columbia* Shuttle Mission. I am truly saddened by the loss of these American heroes, and I will support efforts to ensure that the future of exploratory science research lives on for our future generations.

The state of Ohio is known as "The Birthplace of Aviation," and is also the home of 24 astronauts. This exclusive list includes individuals such as: John Glenn, Neil Armstrong, Carl Walz, Michael T. Good, and Tom Henricks.

Cleveland, Ohio is the home of the NASA Glenn Research Facility; one of eight facilities that conduct ground-based research for NASA in North America. On March 1, 1999, NASA renamed its Cleveland center the "John H. Glenn Research Center at Lewis Field" in honor of John Glenn.

John Glenn was the first American to orbit the Earth. He served as a United States Senator from Ohio and made a historic return to space aboard the Space Shuttle *Discovery* on October 29, 1998, returning on November 7, 1998. The mission included three microgravity science payloads from NASA Lewis Center.

Ohio astronaut and Cleveland native Carl Walz spent six months in a home away from home: the International Space Station (ISS). Mr. Walz was a part of the Expedition 4 crew that traveled to the ISS aboard the Space

Shuttle *Endeavour* when it lifted off on December 5, 2001 to begin the STS-108 mission. He returned to earth on June 5, 2002 during the STS-111 mission. During their stay aboard the ISS, Walz and Expedition 4 crewmate Dan Bursch broke the U.S. space flight endurance record. Mr. Walz also holds the U.S. record for most cumulative time in space, spending 231 days.

Since 1945, NASA Glenn has been a pioneer in rocket engine and propellant technology. This research resulted in the development of the Centaur upper stage, one of NASA Glenn's most significant achievements. The technology made significant contributions to the Apollo program, enabling the massive payloads to support human missions to the moon. Likewise, NASA Glenn has been a pioneer in low-gravity research.

The NASA Glenn Research Center specifically developed experiments for the 16-day *Columbia* mission, STS-107, in the areas of biology, physics, chemistry, and Earth science. These experiments were located both inside and outside the Shuttle, and were the primary focus of the flight crew given that they made up over 60 percent of the mass and 45 percent of the crew time for NASA's Biological and Physical Research portion of the flight.

Some examples of these projects included experiments on: Laminar Soot; Structure of Flame Balls at Low Lewis-number; Water Mist Fire Suppression Experiment; Combustion Module-2 Facility; Critical Viscosity of Xenon; and Space Acceleration Measurement System and Orbital Acceleration Research.

Mr. Speaker, I urge my colleagues to support efforts to ensure that the future of exploratory science research lives on for our future generations.

Mr. WILSON of South Carolina. Mr. Speaker, I rise today to celebrate the life of Dr. Kalpana Chawla, who died tragically aboard the Space Shuttle *Columbia*, along with six other crew members. Dr. Chawla was the first Indian-American woman in space, and an inspiration to the world.

Born in Karnal, India, she was the youngest of four children. Determined to achieve her dream of space flight, Kalpana was one of the first women ever to enroll in aeronautical engineering at India's Punjab Engineering College. Later she immigrated to the United States in the 1980's and was educated at the University of Texas and the University of Colorado.

Dr. Chawla joined NASA in 1988 with her first flight into space in 1997, as a mission specialist and prime robotic arm operator. She is symbolic of the growing importance of Indian-Americans to our nation's culture.

I join with my fellow House India Caucus Co-Chair JOSEPH CROWLEY, in extending to her family our sincere condolences. The people of the United States owe Dr. Kalpana Chawla a debt of gratitude for her bravery and good work, and join with the people of India in mourning her loss.

Mr. BILIRAKIS. Mr. Speaker, on February 1, 2003, the space shuttle *Columbia* and its crew of seven were lost during *Columbia's* re-entry into the Earth's atmosphere. Like many Americans, I am deeply saddened by this national tragedy, and my prayers and condolences go out to the families of our fallen astronauts.

The National Aeronautics and Space Administration (NASA) has been sending crews to space and the moon for over four decades, and space flight has long been accepted as "routine." However, space exploration continues to be dangerous endeavor as there is risk associated with each space flight. The crew of the *Columbia* bravely accepted these dangers and faced them for the benefit of all.

Since its creation in 1958, NASA has accomplished many great scientific and technological feats in air and space. As a nation, we can be inspired by the scientific advances accomplished through space exploration. Discoveries made through space research benefit both space science and the quality of our lives on Earth. Just a few examples include laser surgery, computer bar codes, smoke detectors, pacemakers, and water purification.

These amazing developments could not have been accomplished without the brave men and women who perform experiments in space. Though this is a terrible tragedy, we must keep looking forward. NASA and space research will continue to better the everyday lives of people, and the dreams of present and future space explorers will lead to benefits for everyone on Earth.

Mr. PORTER. Mr. Speaker, spaceship Shuttle Pilot Commander William McCool, 41, a beloved father, husband, son and brother was a man who most of the world could only aspire and dream to become. Commander McCool spent his life in the service of his country and in the service of humanity. He dedicated his life to not only his family but to his dream of one day becoming an astronaut. McCool was an experienced Navy pilot with more than 2,800 hours in flight. He graduated second in his 1983 class at the Naval Academy, went on to test pilot school and became an astronaut in 1996. His excitement for space travel was solidified when on his first and last mission he exclaimed, "there is so much more than what I ever expected, it's beyond imagination, until you actually get up and see it and experience it and feel it."

The tragic loss of the *Columbia* Space Shuttle crew and their sacrifices will never be forgotten, not by William McCool's family, the families of the other crew members, and not by his countrymen. They were as gracious, courteous and giving in the last weeks of their lives as they were in all the other weeks.

William McCool will forever be remembered for his dedication and contributions to science. His adventurous and brave personality is what made this man into an American hero. The legacy of Commander McCool will vicariously live through the next generation of space explorers, for his bravery in the face of death will surely inspire others to pick up where he left off.

We thank you William McCool for your dedication and love of country. Our thoughts and prayers are with his family.

Mr. COSTELLO. Mr. Speaker, today I join my colleagues in remembering the seven extraordinary men and women aboard the Space Shuttle *Columbia* who gave their lives for the pursuit of science and discovery, and in expressing my condolences to their families. Until the tragic events of last Saturday, shuttle flights for many had become routine events; however, each mission is a high-risk endeavor. We are fortunate to have an astronaut corps comprised of highly trained men and women who regularly bear this risk. Their

strong passion for space exploration has immeasurably benefited our nation and the world. We will never forget the dedication and sacrifice of the crew of the *Columbia*.

As a member of the Science Committee, I have followed the space program closely for many years. But its full impact was brought home for me and my constituents in April of 1996, when our hometown hero, Dr. Sandra Magnus, joined NASA. Sandy was born and raised in Belleville, Illinois where she attended Central Junior High School and Belleville West High School. I had the pleasure of accompanying the Administrator of NASA, Mr. Sean O'Keefe, to the Kennedy Space Center for Sandy's first launch on October 7, 2002. To witness a launch is to truly know that space flight is inherently dangerous. But it is also a vital part of the American spirit and the advancement of knowledge, and it is these elements that drive the men and women in the astronaut program to strive for the unknown. If we are to gain a greater understanding of our universe, we must continue the cause of the heroes we lost on Saturday and take every step we can to make future space travel as safe as possible.

We come together today in a period of national and international mourning. Our prayers are dedicated to the heroic crew of *Columbia* and their families. Their names—mission commander Rick Husband, pilot William McCool, payload commander Michael Anderson, mission specialist David Brown, mission specialist Kalpana Chawla, mission specialist Laurel Blair Salton Clark, and payload specialist Ilan Ramon—will live forever in our hearts and minds as dedicated pioneers yearning to reach the stars and who never lost their sense of adventure. I again express my deepest condolences to the families of the crew of the Space Shuttle *Columbia*.

Mr. LEVIN. Mr. Speaker, I rise in strong support of the resolution before the House, which expresses the condolences of the House of Representatives to the families of the astronauts who were lost on the space shuttle *Columbia*. The crew of *Columbia* died doing something important. None of us will forget their courage, dedication and sacrifice and we stand with their families during this difficult time.

In the wake of Saturday's tragedy, we're left with a lot of questions. How did this accident happen? What systems aboard the shuttle failed? Were there warning signs that *Columbia* would be in peril when it returned from orbit? Can the remaining space shuttles be made safe? These questions, and many others, must be candidly answered before the space program can recover from this accident and move forward.

The damage to our nation goes well beyond the loss of *Columbia* and seven extraordinary individuals, and it will not be repaired solely by technological fixes, such as stronger heat-resistant tiles or better insulation on the external fuel tank. I have a young friend named Patrick who was simply devastated when he heard the first news reports that *Columbia* had been lost with no survivors. Patrick is an eight-year-old student in 3rd grade. Like the rest of us, he has many questions. He wanted to know why the astronauts had to die and why there was no way for them to escape from the shuttle when the problem became apparent.

For young children, the space shuttle is much more than a way to launch people and

material into orbit. The shuttle embodies a space program they admire and want to be a part of. Many children, like Patrick, are old enough to know about the 1986 *Challenger* accident, but had come to believe the problems had been fixed and that the shuttles were safe. When we lost *Columbia* and its crew on Saturday, we may have also lost a dream shared by many young people of one day growing up to be an astronaut. We need to find a way to repair this damage as well.

All of us know that space flight is inherently risky. This is not a fact we should be comfortable in accepting. We need to spend the time, effort and resources to find ways to make space flight less risky. This is the most important task before us as we look to the future of the space program.

I commend the Leadership on both sides of the aisle for sponsoring this resolution and urge its passage by the House of Representatives.

Mr. SCHIFF. Mr. Speaker, I rise today to commemorate the crew of the Space Shuttle *Columbia*. To their families, I offer my heartfelt condolences. As a nation, we deeply mourn their loss.

These seven brave men and women aboard the *Columbia* represented the best of our country, the community of nations, and of humanity. I have had the privilege of working with NASA scientists, engineers, and astronauts. To these dedicated men and women, their work is a mission, their colleagues are family. Working together across ethnic, religious, and geographical boundaries, they exemplified the synergism of teamwork, in which the whole is greater than the sum of the parts. Just as they did so well, we must continue to display the courage to take on new challenges, seek answers to the mysteries of nature and the world around us, and we must do so together.

Through their spaceflight, the *Columbia* crew inspired us to think, imagine, and dream beyond the world we can see. They bravely faced daunting challenges in order to reveal the wonders of science. Their lives were dedicated to scientific exploration and the betterment of humankind.

They were truly pioneers, bridging the gap between the known and the unknown, venturing into the depths of space. As scientific voyagers, they expanded the boundaries of knowledge, enabling us to learn more about our universe and our own planet. Their quest to answer as yet unanswered questions embodied mankind's continual search for knowledge and truth.

In honor of their memory and their legacy, we must carry on where they have left off. We must reaffirm our commitment as a nation to space exploration and scientific discovery. We must continue to fund our national space program, to explore our solar system and beyond. We must set ambitious and daring goals, such as landing man on Mars. We must, and we shall, continue the journey that the crew of the *Columbia* so bravely began.

Mr. CRENSHAW. Mr. Speaker, I rise today to honor the lives of the crew of the space shuttle *Columbia*.

The loss of the space shuttle *Columbia* is a tragedy of tremendous proportion. The seven *Columbia* astronauts possessed an unquenchable passion to explore and push the boundaries of science and technology. Michael Anderson, David Brown, Kalpana Chawla, Laurel

Clark, Rick Husband, William McCool and Ilan Ramon were not names familiar to most Americans until Saturday's catastrophe. But as the pain of the loss of these seven brave explorers ebbs with time, the resolve to keep their work ongoing must remain ever vigilant.

I, like many Americans, remember huddling with classmates in excitement as Alan Shepard blasted off in the first American manned space flight in May 1961. Ever since then, I followed both the highs and lows of the space program.

From the outset of our manned space program, it was known that lives could be lost exploring space—just as when man explored previous frontiers. Despite the recent tragedy, there are schoolchildren throughout the world that will be inspired by the *Columbia* seven.

As the nation grieves over its terrible loss of this past Saturday, we must also strengthen our resolve to press forward. Those who died did so as heroes. We must not let them die in vain.

I know all Americans share in the sadness brought about by this event. One measure of mankind is the amount of risk taken for the greater good. These astronauts are clearly heroes whose acts we will remember for all of history. My thoughts and prayers are with the crew of *Columbia* and their families.

Mr. WALSH. Mr. Speaker, I rise in support of the Resolution honoring our fallen NASA heroes who perished last Saturday high above the southwestern skies of the United States. I was stunned and heart broken after hearing the news of this tragic event. My mind quickly thought back to the time of 10:44 AM, January 16th, when NASA's *Columbia* Shuttle Mission STS-107 launched into space from the Kennedy Space Center Pad 39A. I was fortunate enough to attend this event with NASA Administrator Sean O'Keefe, along with a number of students and teachers from Fowler High School in Syracuse, my hometown in New York. The Fowler students were there because they had spent three years researching and analyzing a science project that was carried aboard space shuttle *Columbia*.

As I watched the liftoff, I couldn't help but think of the brave men and women aboard *Columbia* as pioneers who were furthering America's vision of discovery that started in 1958 with the creation of NASA. Actually, this vision started long before NASA and space travel. We are a nation of pioneers. NASA and its mission of human space flight and exploration seems to be a natural extension of the Lewis and Clark expeditions commissioned by President Thomas Jefferson in the early 1800s.

Similar to Lewis and Clark's expedition, *Columbia*'s mission was primarily scientific in nature, furthering mankind's understanding of our universe. I was very proud that my district's small corner of the world was part of historic science mission. On their 16-day journey, *Columbia*'s international crew of seven worked 24-hour-a-day shifts to successfully complete all of the research projects in the space, life and physical sciences. The crew, all from diverse backgrounds—including the first Israeli astronaut, was a true reflection of America at its best. They completed their work, did it well, and no doubt were looking forward to their return home to Cape Kennedy last Saturday.

As our Nation and the world watched in horror, we saw *Columbia* literally explode before our eyes some 200,000 miles in the heavens

above. The crew of *Columbia* and their families knew and accepted the risks associated with their work. They also realized they were representing something much greater than themselves. They were a shining symbol of America. They were explorers on a great new adventure to benefit mankind. For this I thank both the crew and their families.

As we honor the crew, their families, and NASA itself, we will always hold the *Columbia* astronauts in a special place in our hearts. Their sacrifices were great. With the United States flag at half-staff across the Nation to honor the crew of *Columbia*, NASA and space exploration will move forward. We will find the problem that created the disaster, fix it, and move forward. They may well be the legacy left by *Columbia*; a better, safer shuttle for those who follow them. Somehow I think they would like that. God Bless the crew of *Columbia*, we're deeply proud and grateful for their contributions to both our country and the world community. They will not be forgotten.

Mr. LANGEVIN. Mr. Speaker, today I join my colleagues in expressing my deepest condolences to the families, colleagues and friends of the seven crewmembers lost aboard the Space Shuttle *Columbia*. The American people and the United States' space program have suffered a great loss in this tragedy.

These explorers bravely undertook this journey, fulfilling a dream that many work a lifetime to achieve yet few accomplish. *Columbia*'s crewmembers were pilots, physicians, soldiers, scientists, and patriots. Above all they were fathers, mothers, daughters, sons, and friends. It is my hope that this legacy will continue to encourage people around the globe to look beyond the confines of earth for new challenges and inspiration.

There these heroes traveled so far and were so close to returning to their loved ones makes this loss even more upsetting. What had otherwise been a routine and successful mission turned tragic on Saturday morning, and I trust there will be a full investigation into this shocking accident to ensure that future shuttle missions do not meet the same fate.

I join all Rhode Islanders in mourning the tragic loss of Shuttle Commander Rick D. Husband, Pilot William C. McCool, Payload Commander Michael P. Anderson, Mission Specialists David M. Brown, Kalpana Chawla and Laurel Clark and Israel's first astronaut, Ilan Ramon.

My thoughts and prayers are with their loved ones as we remember their lives and honor their immense contributions to space exploration.

Mr. CLAY. I rise today to pay tribute to a very brave and valiant pioneer, Astronaut Michael P. Anderson, one of seven courageous crew members who perished when the space shuttle *Columbia* disintegrated on February 1, 2003. Air Force Colonel Anderson was a Payload Commander aboard space shuttle *Columbia* which had just completed a 16 day scientific journey through space. Tragically, it broke apart just after re-entry into the Earth's atmosphere and only 15 minutes before its scheduled landing at [Kennedy] Space Center.

The entire world was shocked to learn of this tragedy and the citizens of the St. Louis area were just as numbed to learn that Colonel Anderson was the nephew of one of its favorite sons. The reality of this devastation truly hit home and was even more heart wrenching when the St. Louis Post-Dispatch reported that

Dr. James DeClue, a friend, constituent and highly respected ophthalmologist, was among the many close relatives to suffer this tragic loss.

Born on Christmas Day, 43-year-old Colonel Anderson considered Spokane, Washington his hometown. He earned a Bachelor of Science degree in physics/astronomy from the University of Washington in 1981. He was commissioned as a second lieutenant in the Air Force and spent four years flying for the strategic Air Command. He later earned a Master of Science degree in physics from Creighton University in 1990 and was selected by NASA as an astronaut in 1994. As Payload Commander aboard *Columbia*, Colonel Anderson was responsible for the shuttle science mission.

As the first African-American to visit a space station during a trip to the Russian *Mir* outpost, Colonel Anderson will serve as inspiration to minority youth everywhere. He bravely ignored the dangers associated with space travel and risked his life because he believed that what he was doing would have great consequences and benefit all mankind for generations to come. By all accounts he was a man of faith who believed that life was a gift and a blessing. Colonel Anderson fulfilled his life's mission on Earth as a scientist and explorer. He had logged more than 211 hours in space and will always be remembered for his faith in the future.

Mr. Speaker, I would like to extend my condolences to Colonel Anderson's family and let them know how very proud the St. Louis community is of his remarkable accomplishments. Colonel Anderson set lofty goals for himself and accomplished them. He will live forever in our memories. I ask that my colleagues join me in honoring Colonel Michael P. Anderson.

Mr. RYAN of Wisconsin. Mr. Speaker, on Saturday, our nation was unified in sorrow, as we suffered the shocking loss of seven courageous individuals aboard the space shuttle *Columbia*. Among the astronauts who gave their lives in service to our country and in pursuit of knowledge for the betterment of our world was Commander Laurel Clark of Racine, Wisconsin.

Laurel Clark was an inspiration to the people she came in contact with and to many others who read or heard about her numerous achievements. She dared to dream great things and worked hard to make those dreams a reality. A graduate of Racine's Horlick High School as well as the University of Wisconsin, Doctor Clark is a fine example for our students of how much one dedicated person can accomplish when she sets her mind to it.

Clark was a Commander in the U.S. Navy, a flight surgeon who was trained as an undersea medical officer and served with a submarine squadron in Scotland prior to becoming an astronaut. While her education and career achievements are unquestionably impressive, Clark's inquisitive mind, adventurous spirit and positive outlook are even more remarkable. The e-mail message that she sent to her mother the day before the *Columbia* was to return exemplifies this.

She wrote of seeing "some incredible sights: lightning spreading over the Pacific, the Aurora Australia lighting up the entire visible horizon with the cityglow of Australia below, the crescent moon setting over the limb of the Earth, the vast plains of Africa and the dunes on Cape Horn. . . " among other spectacular

sights. She reported flying over Lake Michigan and seeing Wind Point clearly. And Laurel Clark wrote: "I feel blessed to be here representing our country and carrying out the research of scientists around the world." She add: "Thanks to many of you who have supported me and my adventures throughout the years. This was definitely one to beat all. I hope you could feel the positive energy that beamed to the whole planet as we glided over our shared planet."

Laurel Clark was not simply admired and respected; she was and is greatly loved. In addition to being a doctor, a scientist, and a pioneer, Laurel Clark was a beloved wife and mother, a sister, a daughter, a niece and a friend. Our sympathy and prayers are with her family and those close to her. May God bless them and the families and friends of her fellow *Columbia* crew members.

We honor the memory of these heroes, we pray they have found eternal joy and peace, and we take comfort in having been touched by their soaring spirits during their time on Earth.

Mr. TOM DAVIS of Virginia. Mr. Speaker, on the morning of Saturday, February 1st, the men and women of *Columbia* Mission STS-107 were on their way home when they were suddenly and tragically taken from us. Today we offer the respect and gratitude of a grateful nation for their service and their sacrifice.

Over the last few days our Nation has prayed for the family and friends of the lost and have learned of the lives of seven truly extraordinary individuals. Commander Rick Husband, Pilot William McCool, Payload Commander Michael Anderson, Mission Specialist David Brown, Mission Specialist Kalpana Chawla, Mission Specialist Laurel Clark, and Payload Specialist Ilan Ramon understood the risk and were willing to make the ultimate sacrifice for the advancement of humanity.

The crew conducted more than 80 scientific experiments in the physical, life, and space sciences during their voyage. The objective of their mission was to help us solve problems here on Earth through experiments such as growing bone and prostate cancer tissue in search of new treatments; testing new techniques of encapsulating anti-cancer drugs to improve their efficiency; and examining the physics of combustion and fire quenching to gain insights into fire-suppression that cannot be obtained on Earth. Their mission is a reminder of the importance of our space program and the benefits that can be achieved through these efforts.

Our search for understanding and our basic desire to reach into the darkness just beyond our grasp are both the hallmark and the calling of our humanity. As we take these moments to grieve for the lives lost and the families and friends left behind, we also stand here today resolved that space exploration and the cause of research and discovery must go on.

Perhaps it is testimony to the greatness of our society when sending men and women into the heavens seemingly becomes commonplace—and perhaps it is regretful that many of us take notice only when a tragedy such as this occurs. Nevertheless, we were reminded on Saturday that all great endeavors involve great risk. We will go on and continue the work these seven astronauts began. They will go down in history as heroes who paid the ultimate price as pioneers in the frontier of space exploration. For their memories and in

their names, we rededicate our efforts to unlock the mysteries of the heavens.

Ms. LEE. Mr. Speaker, I rise today in support of this resolution mourning the loss of the seven astronauts aboard the space shuttle *Columbia* and expressing our deepest sympathies to the loved ones they left behind.

For those of us on the ground, space shuttle flights sometimes almost seem routine. But to those brave few who actually achieve space flight, it is anything but ordinary—in its glories, in its possibilities, and in its risks.

On Saturday we watched in horror as the *Columbia* came crashing down to earth. Our hearts and prayers go out to the friends and families of those on board.

Seven courageous souls reaching for the stars were aboard. Israel lost a beloved son, and India a native daughter who first went out into the world and then dared to soar above it; those nations join us in our grief. All seven on board—Commander Rick Husband; Pilot William McCool; Mission Specialists Michael Anderson, David Brown, Kalpana Chawla, and Laurel Clark; and Payload Specialist Ilan Ramon—were explorers, fliers, scientists, and heroes.

Astronauts floating in space are almost always awestruck by the beauty of the earth shining before them and they often comment on how peaceful our planet looks from space. As they were returning home, filled with thoughts no doubt of the family and friends awaiting them, I hope such a vision comforted these seven brave souls.

The 19th Psalm begins, "The heavens declare the glory of God, and the sky above proclaims His handiwork." The crew of the *Columbia* reached upward to get a closer look at that handiwork, and though today we deeply mourn their deaths, we also celebrate their lives.

To the parents, husbands, wives, friends, and especially the children of those who were lost, our hearts and prayers are with you as we too mourn their loss.

Ms. WATERS. Mr. Speaker, I rise today to offer my heartfelt sympathy to the families of the seven astronauts who lost their lives Saturday morning. My thoughts and prayers are with the families of the crew and the communities that loved and supported them. This was a terrible tragedy that no family should ever have to endure.

Commander Rick Husband, Pilot William McCool, Payload Commander Michael Anderson, Mission Specialist David Brown, Mission Specialist Kalpana Chawla, Mission Specialist Laurel Clark, and Payload Specialist Ilan Ramon gave their lives in the pursuit of knowledge. The seven brave men and women, who composed this crew rose to the top of their fields through hard work and determination. The international crew of the space shuttle *Columbia* was a group of men and women of extraordinary intelligence, brave hearts and dedication to one of the greatest endeavors that mankind has ever known.

The crew was as diverse as America itself. The six Americans were joined by Ilan Ramon, the first Israeli to go into space. Together, regardless of race, religion or national origin, they worked to ensure the integrity of the mission and to conduct scientific experiments that someday might improve the lives of thousands. They accomplished the mission's goals in outstanding fashion."

I thank these remarkable individuals for their dedication. As a Member of Congress I will

not rest until we know why this tragedy happened and I will do everything in my power to ensure that this does not happen again. In the wake of this horrific accident, as we search for the cause, we must not abandon our space program. It has brought so many wonderful innovations in technology and medicine. What we must do is find the root of the problem and provide the means to ensure that the *Columbia* and *Challenger* tragedies are never repeated.

I call on the President and Congress to honor the memories of these heroes by ensuring that NASA has all the necessary resources to protect future astronauts from tragedy.

Mr. RODRIGUEZ. Mr. Speaker, on February 1, 2003, our nation was faced with a tragedy that occurred hundreds of miles above the earth but hit close to our homes and our hearts. The mission of the space shuttle *Columbia* came to an unexpected end in the midst of the Texas skies sixteen minutes away from its destination.

My heart and the hearts of all Americans go out to the families of the seven honorable and courageous astronauts on board. These men and women were heroes fulfilling their goals and dreams in the space program.

Sadly, this tragedy happened almost exactly seventeen years after the January 28, 1986, loss of the seven heroes of the *Challenger* mission. During their mission, astronauts on the *Columbia* took time to honor their fallen comrades from both the *Challenger* and *Apollo* missions. As a nation mourns, the memories of all three tragic events will be remembered with mixed feelings, for the lives lost and for the missions they were set forth to accomplish.

The *Columbia* mission was assisted by the Lyndon B. Johnson Space Center located in the state of Texas. The primary responsibility of the center is for the designing and developing of space shuttles used for human journey into space as well as training them and participating in programs devoted to medical and engineering experiments. We in Texas are proud to be the home of this integral part of the space program. I commend them in every effort and share their deep sorrow for this tragic loss.

I would like to extend my appreciation and that of a grateful nation to those who assisted in the search for debris. Their ranks include volunteers, fire fighters, and National Guard members. Among those working are local East Texas residents who have taken the time to aid their country by collecting the remnants of *Columbia* and protecting the locations of debris. These volunteers have helped authorities document the information from this tragic event. The combined efforts of the volunteers represent the caring, giving spirit of Americans.

The space shuttle symbolizes the hope for our global future, to reach out as one world into the stars. On *Columbia*, the United States was not the only country represented. Astronaut Kalpana Chawla was the first Indian-born woman to enter space. Her native India and her adopted United States will always remember her efforts and accomplishments. Ilan Ramon, a distinguished colonel in the Israeli Air Force made history as the first Israeli astronaut to ever venture the realms beyond Earth. Israel's pioneer into space was lost, but his spirit of exploration and international cooperation will live on.

Space exploration has been an important part of the technological advancements achieved during this last century. As we embark upon a new one, the need to explore the unknown and venture beyond remains compelling. The families of the *Columbia* astronauts have made bold statements on behalf of their loved ones urging us to keep their dreams alive, "Their hearts were full of enthusiasm, pride in country, faith in their God, and a willingness to accept the risk in pursuit of knowledge. Knowledge that might improve the quality of life for all mankind." This knowledge that we grasp and the essence to know more has kept our nation's space exploration program alive as it will continue to do so for the sake of our children. We best honor these fallen heroes by continuing their work, building a more robust space program for the future.

Mr. FOLEY. Mr. Speaker, I rise in strong support of the House resolution honoring the crew of the Space Shuttle *Columbia* and expressing our condolences to the families of those heroes on STS-107. I also rise in support of our national space program, to which the *Columbia* crew dedicated their lives.

Shuttle flight seems like almost a routine event. Another space shuttle leaves Cape Canaveral to conduct experiments, launch satellites, or link up with the International Space Station. Sometimes, a shuttle launch isn't even deemed newsworthy. As a result, many had begun to forget the tremendous contributions to science and peace that result from the shuttle program. Many also had forgotten that these missions were fraught with danger. But every shuttle launch is dangerous, not because of a lack of skill or dedication in NASA, but because of the nature of the mission—taking fragile people and machines through the atmosphere and into the unforgiving environment of space.

The world received a tragic reminder of the danger of space travel when we lost the *Columbia* on Saturday morning. It was a mission that reflected the best values of the space program. The crew of STS-107 included the first Israeli astronaut, Payload specialist Ilan Ramon, and Indian-born Mission Specialist Kaplana Chawla. The other crew members were Commander Rick D. Husband, Pilot William C. McCool, Mission Specialist David M. Brown, Mission Specialist Michael P. Anderson, and Mission Specialist Laura B. Clark. My sympathies go out to the families of these heroes and also to the people of Israel and India.

Columbia was the first Shuttle flown in April 1981. In its 28th and final mission, *Columbia* conducted important experiments to benefit life sciences and microgravity research.

NASA has now appointed both internal and external boards to investigate the accident. The House Science Committee will also initiate an investigation as it did after the loss of the *Challenger* in 1986. Of course, it is too early to determine the cause of the accident. However, I urge that the investigators be given all the resources necessary to find that cause and be given the authority to make specific recommendations to avoid similar tragedies in the future. These changes must be completed as soon as possible to avoid unnecessary delays that could set back the progress and security that comes from our manned space flight program. For the crew of *Columbia* and their families, I cannot reiterate enough the profound grief we all share. My sympathy and prayers are with them all.

Mr. GALLEGLY. Mr. Speaker, my thoughts and prayers go out to the families and friends of the seven men and women of space shuttle *Columbia*. All seven astronauts were talented and dedicated.

Columbia was commanded by Commander Rick Husband, 45, an Air Force colonel from Amarillo, Texas. Pilot William McCool, 41, was a Navy commander from Lubbock, Texas. Payload commander Michael Anderson, 43, was an Air Force lieutenant colonel. Mission specialist David M. Brown, 46, was a Navy captain, pilot and doctor. Mission specialist Laurel Blair Salton Clark, 41, was a Navy diving medical officer aboard submarines, then a flight surgeon who became an astronaut in 1996.

Payload specialist Ilan Ramon, 48, a colonel in Israel's air force whose mother and grandmother survived the Auschwitz death camp, marked the first Israeli citizen in space. Kalpana Chawla, 41, emigrated to the United States from India in the 1980s and became an astronaut in 1994. It was her second flight.

Many of the lost astronauts have children. All were loved. They are heroes and they will be missed.

May God care for our fallen heroes and their families and friends.

Mr. ETHERIDGE. Mr. Speaker, I rise in strong support of this resolution expressing condolences to the families of the crew of the space shuttle *Columbia*.

The loss of space shuttle *Columbia* is felt deeply across the nation and the globe, and our thoughts and prayers are with the families of the astronauts. These shuttle missions have become so routine that many take them for granted, but these astronauts are truly pioneering American heroes, pushing the envelope in the pursuit of science. America and my constituents in North Carolina continue to support NASA and its mission to explore the universe to expand human knowledge about God's creation.

As a member of the House Science Committee overseeing NASA I am confident that we will get to the bottom of this tragedy and that Americans will continue to reach for the stars.

Mr. TERRY. Mr. Speaker, among the many tributes to the brave men and women aboard the space shuttle *Columbia*, let me add my condolences to each of the families that suffered a loss in this tragedy. These seven individuals devoted their lives to advancing our dreams of space exploration. In their hometowns, in our schools and communities, as well as in space, they worked to enhance our appreciation for their mission. They took time to educate everyone from the youngest aspiring astronauts to those of us who simply marveled at their achievements.

In particular, Michael P. Anderson affected the constituents of Nebraska's second Congressional District. Michael was born in Plattsburg, NY, but was stationed at Offutt Air Force Base in Nebraska from 1986 to 1990. At Offutt, Michael flew EC-135s, or Looking Glass, missions. By 1990 he had earned his master's degree in physics from Creighton University in Omaha. Then in 1994, Michael was selected to join NASA as a future astronaut. In 1998, on his first mission to space, he became the first African-American to visit a space station. Even though he logged over 211 hours of space flight time, Michael never forgot his time in Nebraska.

Michael's friends and former professors at Creighton frequently corresponded with him via email, even when he was in space. His continued relationship with the university provided unique opportunities to students and faculty. Michael's determination to inspire young people was evident in his visits to schools not just in the district I represent, but in communities across the country. His lessons still resonate with the students of Jesuit Middle School he visited in 1998. Before making his visit, Michael stepped into his NASA uniform and just as easily stepped into the role of hero to his young audience.

Michael, as well as the other six astronauts aboard the *Columbia*, left a legacy of proud service. They were all active in their communities and all of them touched many lives. We will miss them, in Nebraska and around the world, and we will not forget their inspiring influence.

Mr. THORNBERRY. Mr. Speaker, the seven astronauts who perished last Saturday on the space shuttle *Columbia* are heroes who gave their lives serving our Nation and mankind. Their loss has been felt deeply not only across America, but in Israel, India, and elsewhere around the world.

The Panhandle and South Plains of Texas have been particularly hard hit by this tragedy because two of the astronauts came from our part of the State. *Columbia* Commander Rick Husband was born and raised in Amarillo. He grew up wanting to be an astronaut and earned his pilot's license at the age of 17. He attended Amarillo High School and graduated from Texas Tech University. Rick and his wife Evelyn were married in Amarillo.

Columbia pilot Willie McCool graduated from Coronado High School just down the road in Lubbock. There he earned the nickname "Cool Willie" and made his mark in the classroom. He also made his mark as a member of the track and cross country teams and as an area runner. In 1978, he won a road race in the Lubbock area. Among those competing that day was a local resident by the name of George W. Bush.

The Panhandle and South Plains of Texas join the Nation and the world in mourning the loss of the seven astronauts of *Columbia*. We pray for their families. We honor their courage, their enthusiasm for the mission, and their determination to advance the frontiers of knowledge. And of course, we will always be proud of Rick Husband and Willie McCool. They are not only heroes for the ages, they are also—and forever will be—heroes of our own.

Mr. Speaker, at this point I would like to formally submit for the record an editorial from the Amarillo Globe News, which explains in greater depth how our area feels at this time.

[From the Amarillo Globe News, Feb. 4, 2003]
EDITORIAL: HUSBAND'S ROOTS A SOURCE OF PRIDE

AMARILLO SHOULD HONOR ITS OWN

Rick Husband never forgot where he came from.

In many ways, he was the perfect example of Amarillo—humble, friendly, dedicated, faithful and committed to achieving his dreams.

These qualities are found in abundance in Amarillo and the Panhandle, an area known for its wide expanses and breathtaking sky but also cherished for the people that truly make the Golden Spread golden.

Col. Husband epitomized these characteristics.

Even those who didn't know him personally felt as if they had a connection.

He was raised here, went to school here and worshiped here.

And though his aspirations took Rick Husband far away, even to the far reaches of space, he remained, indeed, one of us.

This is what made Saturday's tragedy so horrific, so painful and so unbelievable.

When the space shuttle *Columbia* came crashing down in pieces, it seemed as if Amarillo lost a piece of itself.

As the plans to memorialize one of Amarillo's greatest sons begin, this is what needs to be remembered about Col. Husband, not only out of respect and remembrance, but also for the benefit of future generations.

The community has a difficult task in trying to capture the legacy of Rick Husband.

While there are many possibilities, Rick Husband was first and foremost an individual willing to assume the sacrifice and risk of his dream to become an astronaut.

It seems only fitting that a statue of Rick Husband, proudly clad in the uniform he earned, be a strong consideration. In turn, this statue should be prominently displayed, perhaps near City Hall.

Col. Husband was proud of his hometown, and a state highway road sign signifying Amarillo as the home of Rick Husband, *Columbia* commander, also should be a possibility.

There are many ways Amarillo can honor Col. Husband's memory.

What should be remembered is that no matter how far he went, even to places where few have gone before, Rick Husband stayed true to the values and beliefs of home.

Amarillo should be proud.

Mr. BISHOP of Georgia. Mr. Speaker, people in Georgia's Second District tell me they felt a deep personal loss when they learned about the fate of *Columbia* and her crew of seven. From what I've read and observed on television, this is the way people felt throughout the country and around the world—not only in India and Israel where two of the crew members were from, but also in places that have no direct connection with the international space program.

People, everywhere, felt as if they had lost members of their own family.

And, of course, we did.

Although those of us who serve together in Congress may not always want to claim each other as relatives, we are, in fact, all part of one family—as American citizens . . . and as children of God.

The *Columbia* was on a scientific mission.

The magnificent men and women who flew in her risked their lives to explore the unknown and expand the boundaries of understanding.

Their cause was the cause of humanity.

As we mourn their loss, let us pledge to keep their cause alive.

Mr. HOBSON, Mr. Speaker, I rise in support of this resolution to express my sincere condolences to the families of the crew members of the Space Shuttle *Columbia*.

It is with great sorrow that the U.S. House of Representatives is considering this resolution. It is rare that the United States, as a whole, experiences such a sense of loss, and I have not personally known it since the events of September 11. There is not one American who has not been affected by this sad and terrible accident. This tragic loss does not, however, end with the United States. With a diverse crew

aboard the shuttle, this loss is truly being felt around the world.

Last Saturday morning as I began my day as routine as anyone else in America, seven brave astronauts began their triumphant return home from space. Their mission had been one of scientific research and experimentation, and had been highly successful. So many missions before them had ventured into the great mystery known as space, and helped put the United States at the cutting edge of space exploration. Most have returned to us safely. In the coming weeks, NASA and a team of investigators will determine exactly what happened last Saturday morning, and why *Columbia* did not return safely.

We will go back to space. Every time a shuttle mission launches into space, everyone aboard the orbiter knows they are putting themselves into harms way, and have chosen one of the most dangerous professions known. While we have been visiting space for several decades, and safety has always been our number one priority, each astronaut knows the dangers associated. It is now times to reassess our safety measures, insure that never happens again, and press forward with our manned space flight program as those seven brave souls would want us to do.

This tragedy has so profoundly impacted our public consciousness because space travel resonates with the human desire to move forward and to learn more about our existence and our place in the universe. The men and women of the space shuttle *Columbia* were pioneers just like the members of the Lewis and Clark Expedition, the Wright Brothers, the expedition to the North and South Poles, the Apollo Moon landings and other great exploits in human exploration and discovery.

We will always mourn the loss of the crew of the shuttle *Columbia* but we will never give up our quest for knowledge.

Mr. Speaker, I join today with my colleagues, the families and friends of all those in the NASA family, and people across the globe in support of this resolution.

Mr. MARIO DIAZ-BALART of Florida. Mr. Speaker, I come to the floor today to honor the men and women tragically lost on the space shuttle *Columbia*.

These seven astronauts represent the very principles—honor, bravery and dedication—that Americans have looked up to since the beginning of space travel. These heroes are the epitome of what every child in modern times aspires to be. Exploring the last undiscovered frontier is one achievement that only few have done, but all have eagerly sought to do.

While America will mourn the loss of these brave heroes for years to come, let us never forget the importance of space travel. Like explorers from Columbus to Amelia Earheart, the crew of the space shuttle *Columbia* reached frontiers that are only a dream to most of us. In doing so, they have provided mankind with a better understanding of a world we have only begun to discover.

These young men and women leave behind families that have been equally dedicated to the goals of this crew and the future of space travel. I extend my deepest gratitude to these families for the sacrifices they have made in order to help this crew achieve their dreams of space travel.

I ask my colleagues to join me in honoring the seven members of the space shuttle *Columbia* crew who have brought the heroic bravery of past explorers to the horizons of future frontiers.

Ms. McCARTHY of Missouri. Mr. Speaker, I rise today in grief and gratitude to remember the seven brave men and women who perished in the February 1st disaster of the space shuttle *Columbia*. In the words of the President from the memorial service on February 4, "We remember not only one moment of tragedy, but seven lives of great purpose and achievement." Commander Rick D. Husband, pilot William C. McCool, payload commander Michael P. Anderson, payload specialist Ilan Ramon, mission specialist David M. Brown, mission specialist Kalpana Chawla, and mission specialist Laurel Clark now take their places in our collective memory, alongside the seven astronauts lost in the 1986 *Challenger* disaster.

The President, NASA, the House Science Committee and the Senate Science Committee have each begun their investigations. What we learn from these inquiries will enable us to improve our international space program for the betterment of mankind.

My heart goes out to the families who have just lost their loved ones who gave themselves to the greater service of mankind. While the world mourns the loss of the *Columbia* crew, my community joins the extending condolences to the family of Commander Laurel Clark, whose sister lives in Kansas City. Laurel's sister, Lynne Salton, joined the observers for the launch of *Columbia* on January 16th and was anxiously awaiting her older sister's return on Saturday. We cannot know the magnitude of the loss they feel.

In memory of their bravery I wish to share a poem by John Gillespie Magee, Jr., entitled "High Flight". It was quoted at the memorial service for the 1986 *Challenger* disaster, and is etched on the memorial plaque at Challenger Memorial Park in Clear Lake, Texas.

Oh! I have slipped the surly bonds of Earth
And danced the skies on laughter-silvered wings;
Sunward I've climbed, and joined the tumbling mirth
Of sun-split clouds,—and done a hundred things
You have not dreamed of—wheeled and soared and swung
High in the sunlit silence. Hov'ring there,
I've chased the shouting wind along, and flung
My eager craft through footless halls of air
Up, up the long, delirious burning blue
I've topped the wind-swept heights with easy grace
Where never lark, or ever eagle flew—
And, while with silent, lifting mind I've trod
The high untrespassed sanctity of space,
Put out my hand, and touched the face of God.

Mr. Speaker, I join my colleagues in honoring the memory of the seven brave souls who were aboard the illfated space shuttle, *Columbia*, and who will now dance above us in the ether.

Mr. PLATTS. Mr. Speaker, I rise to join with my colleagues in paying tribute to the five brave men and two brave women of the space shuttle *Columbia*, whose lives were tragically lost Saturday morning:

Col. Rick Husband, a husband and father, faithful member of his church's choir, and an astronaut.

Kalpana Chawla, Ph.D., born in India and emigrated to the United States. She loved both her countries, and she was an astronaut.

Commander William McCool, a husband and father, recipient of multiple Navy medals, and an astronaut.

Captain David Brown, a physician and humanitarian, and an astronaut.

Commander Laurel Clark, a wife and mother, recipient of numerous Navy medals, and an astronaut.

Lt. Col. Michael Anderson, a husband and father, recipient of multiple Air Force medals, a Sunday school teacher, and an astronaut.

Col. Ilan Roman, a husband and father, a hero to his people in Israel, and an astronaut. He is said to have carried with him on *Columbia*'s fateful flight a small Torah scroll used at a bar mitzvah in a Nazi concentration camp.

Not just their families, but their Nations—and the world—mourn the passing of these seven individuals because of what they represent, the very best in humanity: bravery, a pioneering spirit, the desire to learn, and the peaceful advancement of mankind.

We will forever remember and always be grateful for the heroic sacrifices made by these courageous souls, along with their families, on behalf of all humanity.

Ms. SCHAKOWSKY. Mr. Speaker, I join people from around the world in paying tribute to the men and women of the space shuttle *Columbia* who were lost on Saturday, February 1st. I offer my deepest condolences to their families and loved ones. On that sad day, the United States, the State of Israel and India lost seven brave visionaries. But during their time on our planet, those heroes were living their dreams of reaching out for the stars. They risked their lives for the sake of improving the lives of all humanity.

To truly honor the legacy of these fallen heroes and their accomplishments, the United States must remain committed to lead the world in space exploration. These courageous individuals were well aware of the risks involved with space travel, but that did not deter them from pursuing their goals. We have experienced tragedy in this arena before, but we have never forgotten the spirit of those lost. It is unfortunate that tragedy has struck again but we must learn from the past and carry on. The United States must continue to improve and stay dedicated to its space program.

The crew of the *Columbia* represented so many different parts of our world. There was Mission Commander Colonel Rick Husband, a NASA veteran since 1994. Lieutenant Colonel Michael Anderson, the Payload Commander, had logged more than 211 hours in space. Dr. Kalpana Chawla emigrated to the United States from India and was the first Indian woman to travel to space. Payload Specialist Colonel Ilan Ramon was Israel's first ever astronaut. Pilot William McCool, Mission Specialist Dr. David M. Brown, and Mission Specialist Dr. Laurel Blair Salton Clark were all making their first ever space flight. All will be remembered as patriots who sacrificed their lives for the greater good.

When we peer into the night sky and observe the stars shining above, let us never forget all those that strived to reach them. We thank them for their sacrifice in the name of discovery for humankind.

Mr. KING of New York. Mr. Speaker, I rise today to honor the lives of the seven astronauts who perished on Saturday as they returned from space aboard the space shuttle *Columbia*: Commander Rick D. Husband, Pilot William C. McCool, Payload Commander Michael P. Anderson, Mission Specialist Kalpana Chawla, Mission Specialist David M. Brown, Mission Specialist Laurel B. Clark, and Payload Specialist Ilan Ramon. These brave people risked their lives to further mankind's understanding of science, medicine, and the universe in which we live.

While we send our condolences to their family, friends, and co-workers, we remember that these individuals died while living out a dream. We cannot forget or neglect this dream. It is our obligation to continue this legacy.

Our hearts go out to the families of these courageous individuals. We will never forget them nor their quest to advance mankind.

Mr. CASTLE. Mr. Speaker, I rise today to recognize the loss of the brave and dedicated seven-member crew of the space shuttle *Columbia*. This tragic event has left an indelible mark on all Americans. *Columbia* was the first operational shuttle built for NASA. It was used for the very first shuttle flight on April 12, 1981. We mourn Commander Rick Husband, Pilot William "Willie" McCool, Payload Commander Michael P. Anderson, Mission Specialist David M. Brown, Mission Specialist Kalpana Chawla, Mission Specialist Laurel Blair Salton Clark, and Israeli Payload Specialist Ilan Ramon. *Columbia*'s seven-member crew represented America's best as well as a growing international partnership in meeting this important challenge of the future.

From John Glenn's first orbit of the Earth, to the Apollo Eleven's landing on the moon, and now the final stages of completion of the first international space station, the United States has been and will continue to be the world's leader in space exploration. As the nation mourns and NASA begins its investigation to determine the cause of this tragic event, I believe the people of Delaware and the nation remain strongly committed to the U.S. space program.

Delaware has strong ties to the US space program. ILC Dover Inc., a company based in Frederica, Delaware, has made space suits for NASA since the days of the *Apollo* program and Neil Armstrong's first steps on the moon. Its workers made parts of two spacesuits on-board during *Columbia*'s mission. These suits would have been worn during any space walk portion of the mission. ILC Dover is now in the process of constructing impact bag systems that will be used on probes scheduled to fly to Mars this summer. All the employees of ILC Dover, Inc. work with heavy hearts these days as they remember loss of the crew they have worked all these years to protect.

Delawareans enthusiasm for the space program is evident in their desire to educate their children about our space program. This past year, I was very pleased to visit the future campus of the Delaware Aerospace Education Foundation's Innovation, Technology and Exploration Center. This \$25 million facility will have its ground breaking this Spring in Smyrna,

Delaware. It will feature 40,000 square feet of an interactive museum, planetarium, and theater. Through the leadership of Dr. Stephanie Wright, the foundation sponsors numerous programs that promote math, science, and technology education through youth academies, presentations, symposiums, events, and professional development for teachers. I hope the new Aerospace Education Center will work to honor the sacrifices made by the *Columbia* crew through their upcoming programs.

Mr. Speaker, I salute the crew and supporting members of this *Columbia* mission. Americans understand the excitement and risks that come with the important job that NASA undertakes everyday. It is this bold and courageous effort that demonstrates America's commitment to leading the world in the future of space exploration. Although I am saddened by our nation's tragic loss, I am very proud to be an American and will continue to work for an effective space program to benefit NASA's mission in Delaware, the nation, and the world and beyond.

Mr. LARSON of Connecticut. Mr. Speaker, exploring the unknown has always been perilous. Magellan died in the Philippines defending his men as they were circumnavigating the globe. Lewis and Clark faced numerous dangers as they were exploring the bounds of the American frontier. There is no longer any terra incognita, so man's curiosity has led him to explore space. We are still literally light years away from exploring what our grandchildren will one day be familiar with. As we embark on our quest to find out what our galaxy holds, we have almost forgotten that it takes a great deal of bravery to strike out into the unknown, and that it is not without great risk.

On February 1 we were reminded of the danger that we had almost forgotten. Among the seven crewmembers was Dr. Kalpana Chawla. Dr. Chawla grew up in an impoverished small town in India where women are not expected to get an education, much less float in the weightlessness of space. Nevertheless, she persevered, and is an inspiration to anyone in grinding poverty whose dreams may be laughed at. Pilot Willie McCool was the son of a Vietnam veteran who finished second in his Naval Academy class, evidence that we are sending the best and brightest out on these dangerous missions so they may accomplish these important objectives. Navy Captain David M. Brown was a gymnast at the College of William and Mary, and when he addressed the campus in September he noted that what he was doing was similar to what the College's founders did when they came over from England, and that they faced similar risks. Air Force Lieutenant Colonel Michael P. Anderson watched Neil Armstrong and Buzz Aldrin on the historic *Apollo 11* flight in 1969, and the excitement never left him. He served as an inspiration to minority children across the United States as he was one of the first African-Americans to join NASA in 1994. The shuttle's commander, Rick D. Husband, was a model of perseverance. He tried and failed three times to get into NASA, but he never gave up hope that one day he too could soar into the cosmos, and on the fourth try was accepted. He was a talented pilot who had been able to fly since the age of 18. Navy Commander Laurel Blair Salton Clark was no stranger to the dangers of the unknown; she had conducted medical evacuations from submarines before joining NASA.

Finally, there was Ilan Ramon. He was the son of a Holocaust survivor and had fought in the Yom Kippur War and the Israeli-Lebanese conflict, so his bravery was proven well before that fateful Saturday morning. He was an Israeli Air Force pilot who served as an inspiration to his country, which is in a time of turmoil, doubt and suffering. He showed us all that space does not belong to America, but that it is for all of mankind to experience, regardless of nationality or religion.

Columbia's name comes from Christopher Columbus. He too faced the dangers of hurtling into the unknown, yet without him America would not be what it is today. We were the first nation to put men on the moon because we are instilled with Columbus's spirit of wonder, curiosity, and adventure. We want to learn and explore, know everything there is to be known and then share it with the world. This is why we have NASA, why we have space shuttles, and, regrettably, why these seven souls lost their lives over Texas that blue morning.

For their service and dedication to this vision, I thank them on behalf of my constituents and my children. Their lives will be filled with inspiration and wonder thanks to these brave heroes' dedication and commitment to the noble enterprise of scientific discovery.

Mr. CASE. Mr. Speaker, I humbly rise in support of H. Res. 51. I want to thank the Majority and Minority Leaders for bringing this resolution to the House floor on a completely united basis.

Mr. Speaker, what happened on the morning of February 1st was truly a world tragedy. The crew of the space shuttle *Columbia*, returning from a productive sixteen day scientific mission to the International Space Station, was lost over Texas. My heart goes out to the families of Michael Anderson, David Brown, Kalpana Chawla, Laurel Clark, Rick Husband, William McCool, and Ilan Ramon, the heroic crew now known as the *Columbia* 7.

On Saturday, we were all again reminded of the dangers of space exploration. Many Americans, my self included, vividly remember January 28, 1986, when the space shuttle *Challenger* was lost a minute and thirteen seconds into its launch. That tragedy, as well as Saturday's, shocked our nation and focused national attention on the space program and the courageous men and women who risk their lives in the name of science and exploration. The heroic crew of the *Columbia* was composed of seven of our best and brightest men and women, who reflected the diversity of our nation and world and embodied a new spirit of international cooperation.

The *Columbia* tragedy was especially trying and painful for my home state, for one of our heroes met the same fate in the 1986 *Challenger* tragedy. Lt. Col. Ellison Onizuka was from my home island, the Big Island of Hawaii.

Lt. Col. Onizuka was the ultimate local boy made good and the first Japanese-American to fly into space. Like those on the *Columbia* 7, he was a strong advocate for exploration, education and adventure. He once said, "From your vantage point, your education and imagination will carry you to places which we won't believe possible . . . Think of the new horizons you can explore."

He knew the risks, that there was a significant chance that something could go wrong on a space mission. But he was a dreamer, just like all heroes and leaders. In reinforcing

his strong support for man's commitment to exploring new boundaries, he said: "Make your life count . . . and your world will be a better place because you tried . . . Every generation has the obligation to free men's minds for a look at new worlds . . . to look out from a higher plateau than the last generation."

Ellison's words still ring true today, and his actions embody the spirit of space exploration and scientific experimentation. He certainly would have said, notwithstanding the loss of the *Columbia*, that we must go on.

Mr. SHAYS. Mr. Speaker, I join my colleagues in extending my condolences to the families, friends and colleagues of the seven *Columbia* crew members.

Many of us watched with awe and pride as the Space Shuttle *Columbia* lifted off on its first mission on April 12, 1981. It made history as the first shuttle to orbit earth, a tangible expression of human aspiration.

The destruction of the *Columbia* is a tragedy for our country, for the families of the lost astronauts and for the nation of Israel. These brave men and women deserve our admiration and respect and their families deserve our love and support.

Forty years after President Kennedy challenged Americans to reach the moon, this disaster is a sober reminder that space travel remains a daring and dangerous endeavor. The *Columbia* crew willingly braved those dangers to help improve the lives of all mankind.

As we celebrate their courageous spirit and mourn their death, we must dedicate ourselves to conducting a complete and thorough investigation of what went terribly wrong at the outer ring of the Earth's atmosphere, forty miles above Texas. Our history, our thirst for knowledge and our curiosity about what lies beyond demands that we learn from this tragedy and ensure the safety of future missions.

Mr. CRAMER. Mr. Speaker, I rise today to honor the lives of the seven astronauts onboard the Space Shuttle *Columbia* Mission STS-107. The group of brave men and women can never be replaced. They were truly among the best and the brightest, and America—as well as the entire world—has suffered a tremendous loss.

However, in the midst of our grief, we must use their sacrifice as inspiration to continue our efforts to explore space. As we've heard through their families and friends, the *Columbia* crew would have wanted their colleagues to continue in their footsteps.

Harry Truman once said, "Men make history and not the other way around . . . Progress occurs when courageous, skillful leaders seize the opportunity to change things for the better." These great leaders on the Space Shuttle *Columbia* sought to change things for the better, and would want future generations to continue to reach for those same goals.

Space exploration is not only a critical part of our heritage, but it is vital to the future of our nation. It increases our understanding of the world that we live in and the Universe around us. The extreme conditions that can only be found in space provide us with a unique research laboratory that we could never recreate on Earth. Our nation has established itself as the leader in space exploration, which contributes greatly to the American spirit. Space exploration inspires our youth and leads to a more scientifically literate society.

The astronauts onboard the Shuttle *Columbia* believed all of these same things, which is why they declared—and sacrificed—their lives for their mission of scientific discovery. I'd share to share with you something Gus Grissom, who lost his life to a fire on *Apollo 1* in 1967, once said: "If we die, we want people to accept it. We're in a risky business, and we hope that if anything happens to us it will not delay the program. The conquest of space is worth the risk of life."

While the crew of *Apollo 1* had different missions, the goal of space exploration remains the same. Judging by the lives the *Columbia* crew members led and their dedication to space exploration, I believe they lived by these same words. These astronauts knew and accepted the risks of space travel, and gave their lives performing a research mission with the purpose of improving our lives back here on Earth.

We must press on and continue the mission they began. While we grieve today, we soon must focus on the astronauts that have been onboard the International Space Station since November and the astronauts who will continue to explore in space. They must know that we are dedicated to doing our best to provide for their safety. For the health of our nation and for the future generations that will no doubt benefit from the research conducted in space, we must continue with their missions.

Mr. Speaker, we must demand that these astronauts did not die in vain, instead we should cherish and learn from their sacrifice to ensure the safety and success of future missions.

I'd like to close with a quote by Dr. Laurel Clark. One experiment she was working on during orbit was to study a silkworm cocoon hatching. When we saw the moth, Dr. Clark remarked, "There was a moth in there, and it still had its wings crumpled up, and it was just starting to pump its wings up. Life continues in lots of places, and life is a magical thing."

I think we can learn from Dr. Clark's faith in life and trust that the lives of these seven men and women will continue in some other places, just as she witnessed a moth's life continue in space.

Mr. MEEK of Florida. Mr. Speaker, I join with my colleagues in honoring the brave men and women of the Space Shuttle *Columbia*, in celebrating their lives and marveling at their achievements; in mourning their passing and extending whatever solace and comfort we can to their families and loved ones.

Space travel is important to our country, but it is particularly important to my State of Florida. All Floridians take pride in Cape Canaveral. Thousands of Floridians are part of the team that puts the shuttle together, loads up its space cargo and launches it into space.

Everyone who has ever seen a shuttle launch goes away feeling differently; about our country, certainly, but also about the nature of human beings on this Earth. For we are a curious species.

Our entire history, in countless tales that preceded Jason and the Argonauts, and in countless voyages that followed the voyage of Columbus, is a long, long saga of people trying to go places no one has ever been; seeing things no one has ever seen; and learning things that no one has ever known. And this is the type of people that the men and women of the *Columbia* were.

As is so often the case in life, we have learned more about them after their deaths than we knew when they were living. But what we have learned is that they were truly remarkable people—people with dreams who worked hard, studied hard, exercised discipline, raised their families, served their communities and their country. Each of these astronauts would be a fine role model for our sons and daughters.

Our hearts and prayers go out to their families. I hope they can take some comfort in knowing how much their strength and the lives of their loved ones have touched so many they have never met.

In the words of Abraham Lincoln, speaking about another great national tragedy at the Battle of Gettysburg, "It is for us the living, rather, to be dedicated here to the unfinished work which they . . . have thus far so nobly advanced."

Mr. Speaker, almost 100 years ago, Orville Wright took off from a launching rail in North Carolina and flew for 12 seconds and a distance of 120 feet. Space shuttle *Columbia* took off from Florida and flew for 16 days at a distance of 6.6 million miles. Because of the special people that these astronauts were, I marvel to think about how long and how far our great, great grandchildren will fly 100 years from today.

Mr. MATHESON. Mr. Speaker, Saturday's tragedy was both unexpected and shocking. It evoked memories of an earlier American tragedy, the 1986 Space Shuttle *Challenger* disaster. But we must remember that this terrible loss shows the continued bravery of the American space program. We forget so easily the immense risks associated with space exploration, and I commend those individuals who continue to put themselves at great risk in order for all of us to live in a more enlightened and advanced society.

In the wake of this tragedy, NASA and the Congress must work together to initiate the most complete and thorough investigation possible in order to prevent similar tragedies in the future. The work of exploration is ongoing and we must be vigilant in maintaining standards of safety. Larger questions about the future of our journey into space must also be addressed by Congress.

It is important that we also remember the three crewmembers still on board the International Space Station who lost valued friends and peers. I am hopeful that they will safely return to Earth as soon as possible.

I extend my deepest sympathies to the families of the heroic crew of Space Shuttle *Columbia*. I am certain that the men and women at NASA are struggling with their grief, as well, and my thoughts are with them also.

Let us all remember the remarkable individuals who reached the stars and lived lives of great American accomplishment.

Ms. WATSON. Mr. Speaker, words are not sufficient to describe how I felt on Saturday morning when the Chairman of the Democratic Caucus announced that the space shuttle *Columbia* had gone down. My heart goes out to the families and friends of the seven courageous men and women astronauts. We mourn the tragic loss of *Columbia's* crew, whose lives were precious to all Americans.

Today, as NASA and the Nation continues to struggle with shock and sadness, I want to take this opportunity to commend three Dorsey High School Students from my Congres-

sional District—Atiabab Ijan Amabel, Christina Mojarro, and Juan Carlos Ortega—for participating in the STARS Academy Research Mission with an experiment that was placed aboard space shuttle *Columbia*.

The STARS Academy is an online cultural and scientific global learning program. It incorporates a standards based curriculum in math, science, language arts, geography, and technology. On the STS-107 mission, schools from six countries developed life and physical sciences experiments, while working with astronauts, space scientists, engineers, and other experts. For this mission the participating schools came from:

Australia, Spider Experiment;
Israel, Crystalline Fiber Growth;
Japan, Medaka Fish Growth;
USA, Syracuse Ants Experiment;
Liechtenstein, Carpenter Bee Experiment;
and
China, Silk Worm Experiment.

These students were involved for over two years.

Just over one year ago this wonderful project came to my attention, and I immediately approached Principal Mahmud of Dorsey High School with the idea. The Dorsey science students were required to write an essay explaining why they wanted to participate in the STARS Academy. The three students represent some of the best and finest that Los Angeles Unified School District has to offer. If you do nothing else but read their essays you will know why.

Although the Dorsey students joined STARS late in the program, I was pleased that they could participate in this most worthy and highly sophisticated scientific experiment. It is this kind of event that can provide the inspiration to a young man or woman to pursue a career in science and space exploration.

After the July 2002 launch postponement, and the Chinese students' visa problems, the Dorsey students were challenged to move from observers to collaborators on the Silk Worm Experiment. This bi-national experiment investigates the effects of microgravity on silk-worm larvae development and silk production. Juan, Christina, and Amabel fully constructed the silk worm habitat and installed it aboard the payload module, prior to *Columbia's* launch.

I applaud the dedication of LA Unified Instructional Technology Administrator Joe Oliver for his work with the students to instruct them in a short amount of time. Joe changed his focus from a little of everything to Silk Worm 101, and was pleasantly surprised at how quickly the students learned the new material. I am especially proud of Christina Mojarro, Juan Ortega, and Amabel Atiabab who have represented themselves, their families, Dorsey High School, LAUSD, California's 33rd District, and Los Angeles, so well.

Mr. Speaker, despite the tragic events, this is an historic moment for Dorsey High School and its students who participated in the Silk Worm Experiment. Their projects and dedication to science are fitting honors to the astronauts who lost their lives and an inspiration to all future space explorers.

Mr. ROTHMAN. Mr. Speaker, I wish to offer my strong support for the resolution.

As they have been since Saturday, my prayers and thoughts are with the families and friends of the seven space shuttle *Columbia* astronauts who lost their lives. Our Nation

mourns with them and the people of Israel and India who each lost a native hero in this terrible disaster.

The tragedy that has befallen our Nation touches each and every American deeply and personally. Throughout our modern history, the NASA program and the astronauts who have courageously committed their lives to space exploration have represented the hope and promise of the future. In an endless universe with so many unknowns, these brave men and women are the ones who set out to find the answers that further the understanding of our existence and provide the keys to the technology of the future.

When that promise of our future is suddenly struck with great tragedy, we feel an emptiness deep within us. While we mourn, we must remember that space travel must go on and that we must continue to explore space in order to advance the causes and abilities of humankind.

As a Congressman, I have had the honor of personally getting to know a number of our NASA astronauts, having brought them to speak to students at several Bergen and Hudson County elementary and middle schools. As the astronauts made their presentations and discussed their experiences, I saw the eyes of the children light up with wonder, amazement, and admiration. Our astronauts, who are some of the brightest people on our planet, are heroes and as inspiration to all of us, and in particular to our children, who see the hope of a better tomorrow for themselves through the eyes of our space explorers.

As we try to find the answers behind this disaster, all Americans must unite and draw strength from one another in order to heal and move forward. May God bless our heroes who were lost as well as their families and loved ones, and may God bless America.

Mr. UDALL of Colorado. Mr. Speaker, I rise in support of this resolution and in tribute to the *Columbia* seven. Today we mourn them all. We mourn Commander Rick Husband, Pilot William McCool, Mission Specialists Michael Anderson, David Brown, Kalpana Chawla, and Laurel Clark, and Payload Specialist Ilan Ramon.

All seven of the *Columbia* left behind husbands and wives and family and friends. They were role models to young people everywhere who dreamed of space. They symbolized possibility and achievement to Americans, Indians, Israelis, and citizens of the world. They gave their lives in exploration for America and the world. They hold a special place in all of our hearts.

I would like to say a few words about Dr. Chawla, who earned her doctorate in aerospace engineering at the University of Colorado. Dr. Chawla was the second former CU student to be lost on a NASA mission, joining Ellison Onizuka, who died in the *Challenger* accident in 1986.

Mr. Speaker, I've included an article from the Denver Post detailing how Dr. Chawla spent five hours on *Columbia* salvaging the broken space experiment of students at the Colorado School of Mines. Because of Dr. Chawla's help, the students were able to download almost all of the data they had hoped for through a satellite link.

Those who knew Dr. Chawla talk about her incredible determination and drive and her ability to achieve against so many odds. A friend of hers from India said that "She never

had the feeling that because she was a girl, there were things she should not do." She left India, but she never forgot it. Beginning in 1998, at her urging, NASA invited high school students from India to take part in a summer space experience program in Houston. One of the students who visited Houston remembered something Dr. Chawla said to her there: "Whatever you believe in, do—just follow your dreams."

In his State of the Union address announcing his vision to put a man on the moon, President Kennedy said that "it will not be one man going to the moon . . . it will be an entire nation." And it has been an entire nation supporting our men and women in space, dreaming their dreams along with them, following their adventures, as a way to satisfy our own curiosity, to stimulate our own sense of discovery and wonder.

I am committed to doing all I can to honor the memory of our brave astronauts. The House Science Committee's Subcommittee on Space and Aeronautics, of which I am a member, will be conducting hearings to try to understand what happened to *Columbia*, to make sure such a tragedy never happens again, and to help NASA recover and begin anew its mission of discovery. I intend to take an active part in those hearings.

The exploration of space remains one of the great adventures of all time. I am committed to keeping the dream alive, and along with it, the spirits of the *Columbia* seven.

[From the Denver Post, Feb. 2, 2003]

(By Dave Curtin)

Astronaut Kalpana Chawla became a hero to students at Colorado School of Mines when she went beyond NASA protocol to spend five hours Monday salvaging their broken space experiment.

But more than that, Chawla and her six crewmates made the students feel like their best friends and equals in space science as they worked closely together during the past week.

"They were real people. They didn't put themselves above anyone else. They made us feel important," said Ned Riedel, who helped design the Mines experiment, a system designed to fight fire in space and on Earth. He worked directly with the astronauts from Johnson Space Center in Houston until he returned to Colorado on Friday.

Chawla worked tirelessly to fix a pesky leak on the Mines firefighting experiment as five students and professors watched, riveted, from payload control at the space center.

When she was finished with the fixes, the experiment worked like a charm and data flowed to the students on the ground for a week, saving the future of the project.

Students couldn't believe the time Chawla and the other astronauts devoted to their experiment. It was only one of 80 aboard the 16-day flight, including one by international high school students coordinated by the University of Colorado.

And they couldn't believe how unassuming the astronauts were since meeting them 2½ years ago and training them on the experiment.

"They were incredibly nice people. Easy-going and down-to-earth people," said Riedel. "Working the mission with them, they were just fantastic. The timeline in space didn't allow the time we needed to get it online, and they gave it to us anyway," he said.

"We learned things we never expected. We celebrated all the way to the end. We were ecstatic, which makes this even more hor-

rible," Riedel said. "When I head, I cried. I thought of their families. Now I'm just shocked. I can't get over it."

"They sacrificed time from their meals and other things to give us time not scheduled for our experiment," said David Petrick, a Mines graduate who also returned Friday from Johnson Space Center, where he worked with the astronauts.

The school's new-generation firefighting system produces a fine-water mist in spacecraft and has commercial applications on Earth, including in office towers.

A 1996 international ban on ozone-depleting Halon 1301 as a chemical fire suppressant has created an urgent need for other environmentally friendly fire suppressants. The ban went into effect in 2000.

Using water droplets one-tenth the size of a human hair, the Mines mister creates a fog that sucks the heat out of fire, preventing its spread and saving lives.

It's preferable to conventional water sprinklers because it causes less damage to expensive equipment such as computers. It's also an attractive alternative for planes and ships traveling with weight limits, said Frank Schowengerdt, director of Mines' Center for Commercial Application of Combustion in Space, one of 17 NASA-funded commercial space-research centers in the country.

The experiment on board *Columbia* was a tightly sealed 1½-foot canister with a tiny propane flame that ignited a gas mixture so researchers could examine how the mist worked in space.

Thanks to the astronauts' devotion, the students were able to download 90 percent of the data they had hoped for through a satellite link last week.

"This experiment that the shuttle crew worked so hard to repair a few days ago will move forward in their honor, and we will use the data they gleaned in space to build a firefighting system they would be proud of," Schowengerdt said. "And we will think of a way to name it after them. They made all the difference."

The students were stunned at how humble the shuttle crew was as they worked together over the months.

"What makes them extra special is you could walk up to them and they would remember your name and have a beer with you," Riedel said.

That happened to Riedel and Petrick in December during final simulation exercises, when the students bumped into the shuttle crew at Petey's, an astronaut after-hours hangout near Johnson Space Center.

"I knew Ilan Ramon because he's an astronaut, but it floored me that he remembered my name and started introducing me around like I was his best friend," Riedel said. "That's just the kind of people they all were."

The students were grieving on Saturday, feeling the loss of their science partners—as astronauts they had come to call friends.

"We were walking on sunshine Friday," Petrick said. "The Mission Control folks were smiling at us because we were dancing and singing, we were so happy. Then on Saturday we woke to this happening."

"I thought on Monday it was going to be a tragedy because we wouldn't be able to get any data for our experiment," Riedel said.

"Now I know the definition of tragedy," he said, breaking into tears.

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

The SPEAKER pro tempore (Mr. SHIMKUS). All time for debate has expired.

The Clerk will report the resolution. The Clerk read as follows:

H. RES. 51

Whereas the House of Representatives has learned with profound sorrow of the tragedy

during re-entry of the space shuttle program of the National Aeronautics and Space Administration, involving the Columbia Shuttle Mission STS-107 and its crew consisting of Rick D. Husband (commander), William C. McCool (pilot), Michael P. Anderson (payload commander), David M. Brown (mission specialist), Kalpana Chawla (mission specialist), Laurel Blair Salton Clark (mission specialist), and Ilan Ramon (payload specialist): Now, therefore, be it

Resolved, That the House of Representatives expresses its condolences to the families of the crew members of the Columbia shuttle mission; and be it further

Resolved, That the Clerk communicate these resolutions to the families of the Columbia crew; and be it further

Resolved, That when the House of Representatives adjourns today, it adjourns as a further mark of respect to the memory of the valiant crew members of the Columbia shuttle mission.

□ 1730

The SPEAKER pro tempore (Mr. SHIMKUS). Pursuant to the order of the House of today, the previous question is ordered.

The question is on the resolution.

The question was taken; and the Speaker pro tempore announced that the ayes appeared to have it.

Mr. ROHRBACHER. Mr. Speaker, on that I demand the yeas and nays.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, further proceedings on this resolution are postponed until later today.

COMMUNICATION FROM THE HON. LUIS GUTIERREZ, MEMBER OF CONGRESS

The SPEAKER pro tempore laid before the House the following communication from the Honorable LUIS GUTIERREZ, Member of Congress:

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, DC, February 5, 2003.

Hon. DENNIS J. HASTERT,
Speaker, House of Representatives, Washington, DC.

DEAR MR. SPEAKER: This is to formally notify you, pursuant to Rule VIII of the Rules of the House of Representatives, that I have been served with a civil subpoena for documents issued by the Circuit Court for Cook County, Illinois.

After consulting with the Office of General Counsel, I will make the determinations required by Rule VIII.

Sincerely,

LUIS V. GUTIERREZ,
Member of Congress.

MILLENNIUM CHALLENGE ACT OF 2003—MESSAGE FROM THE PRESIDENT OF THE UNITED STATES (H. DOC. NO. 108-37)

The SPEAKER pro tempore laid before the House the following message from the President of the United States; which was read and, together with the accompanying papers, without objection, referred to the Committee on International Relations, the Committee on Ways and Means, the Committee on the Judiciary, the Committee on Resources, and the Committee on Government Reform and ordered to be printed: