

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

A motion to reconsider was laid on the table.

CELEBRATING 50TH ANNIVERSARY OF THE U.S. TELEVISION INFRARED OBSERVATION SATELLITE

Ms. FUDGE. Mr. Speaker, I move to suspend the rules and agree to the resolution (H. Res. 1231) celebrating the 50th anniversary of the United States Television Infrared Observation Satellite, the world's first meteorological satellite, launched by the National Aeronautics and Space Administration on April 1, 1960, and fulfilling the promise of President Eisenhower to all nations of the world to promote the peaceful use of space for the benefit of all mankind.

The Clerk read the title of the resolution.

The text of the resolution is as follows:

H. RES. 1231

Whereas, April 1, 2010, is the 50th anniversary of the launch by the United States of the Television Infrared Observation Satellite (TIROS I), the first weather observation satellite, that was capable of taking television images on command and remotely at locations around the world, and either recording the pictures as television signals for subsequent playback or transmitting the images to ground stations in real time;

Whereas TIROS resulted from the actions by President Eisenhower and Congress to create the National Aeronautics and Space Administration (NASA), a civilian space agency, which applied technology from several military programs that had been directed by the U.S. Army Signal Corps Development and Research Labs (USASCDRL) at Fort Monmouth, New Jersey, and the United States Army Ballistic Missile Agency in Huntsville, Alabama;

Whereas TIROS I images offered meteorologists the ability to examine large-scale weather patterns to improve weather forecasting and enable early warning of approaching storms, thus saving lives and property around the world;

Whereas the TIROS I images led to a better understanding of global patterns and supported transmission of detailed local weather information to national weather agencies around the world;

Whereas the realization of TIROS I was made possible by years of development of computers, missile systems, television imaging, magnetic recording, semiconductor devices, and solar cell applications, all of which resulted from both Government and private sector investments;

Whereas Government investments in research and development made possible the deployment of satellite tracking networks, worldwide WWV receiver time base systems, tracking data reduction for orbit element determination, and other facilities essential to the satellite applications;

Whereas Government and contractor personnel collaborated to observe and analyze the motion of TIROS I in the Earth's magnetic field, and developed satellite magnetic attitude controls for later TIROS and other spacecraft to utilize the Earth's magnetic field to orient satellites in Earth orbit;

Whereas the success of TIROS I was a significant Cold War event that restored the na-

tional pride and confidence in the space program;

Whereas, since the launch of TIROS I, the United States has launched over 82 experimental and operational meteorological satellites;

Whereas NASA's Nimbus Satellites and Advanced Communications Technology Satellite continued to enhance understanding and performance by further testing and development of space power systems, sensor development, and other technologies;

Whereas the National Oceanic and Atmospheric Administration (NOAA) manages and operates fleets of satellites for the purposes of environmental and weather monitoring;

Whereas similar TIROS missions employed launch vehicles, spacecraft, and imaging equipment that was developed by NASA, the United States Air Force and their contractors and has performed in an outstanding manner;

Whereas the next 50 years of United States accomplishments in space, like other important fields, will rely on individuals possessing strong mathematics, science, and engineering skills and the educators who will train such individuals; and

Whereas the United States space program enables the development of advanced technologies, skills, and capabilities that support the competitiveness and economic growth of the United States: Now, therefore, be it

Resolved, That the House of Representatives—

(1) celebrates the achievement of the National Aeronautics and Space Administration and the Television Infrared Observation Satellite (TIROS I) team who worked together to enable the successful launch and operation of TIROS I by the United States to establish applications of space systems and technology for the benefit of people worldwide;

(2) supports science, technology, engineering, and mathematics education programs which are critical for preparing the next generation of engineers and scientists to lead future United States space endeavors;

(3) recognizes the role of the United States space program in strengthening the scientific and engineering foundation that contributes to United States innovation and economic growth; and

(4) looks forward to the next 50 years of United States achievements in the peaceful use of space to benefit all mankind.

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Ohio (Ms. FUDGE) and the gentleman from Texas (Mr. HALL) each will control 20 minutes.

The Chair recognizes the gentlewoman from Ohio.

GENERAL LEAVE

Ms. FUDGE. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H. Res. 1231, the resolution now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from Ohio?

There was no objection.

Ms. FUDGE. I yield myself such time as I may consume.

Mr. Speaker, I rise today in support of H. Res. 1231, celebrating the 50th anniversary of the United States Television Infrared Observation Satellite.

Launched by the National Aeronautics and Space Administration on

April 1, 1960, the United States Television Infrared Observation Satellite, better known as TIROS I, demonstrated the beginning of a new American capability—the ability to examine weather patterns from space and to enable the early warnings of storms.

The TIROS I spacecraft gave the United States crucial experience related to satellite technology and applications. Over the past 50 years, NASA has continued to develop increasingly capable weather satellites for operation by the National Oceanic and Atmospheric Administration. Because of the technology pioneered by TIROS I, meteorologists have access to information that helps to save lives and property around the world. Today, American Earth observation satellites track everything from the movements of volcanic ash over Europe to the spread of petroleum over the Gulf of Mexico.

TIROS I is a shining example of the peaceful use of outer space and of the benefits that our civil space program provides for the United States and for the world.

I want to thank my colleague from New Jersey (Mr. HOLT) for introducing this resolution, and I urge my colleagues to join me in supporting H. Res. 1231, marking the 50th anniversary of TIROS I.

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

Mr. HALL of Texas. I yield myself such time as I may consume.

Mr. Speaker, I rise today in support of House Resolution 1231, celebrating the 50th anniversary of the United States Television Infrared Observation Satellite, which is the world's first meteorological satellite, launched by the National Aeronautics and Space Administration on April 1, 1960.

The launching of Sputnik in 1957 signaled the Soviet Union's advances in the space race with the United States. This event caused the creation of NASA, and it precipitated the push by the U.S. to gain a technological advantage in space. It was during this time that NASA launched the Television Infrared Observation Satellite, or TIROS, to determine if satellites could be useful in the study of the Earth.

It was unknown whether or not satellite observations would be an effective means to determine the meteorological condition on the Earth's surface. Scientists postulated that space-based observations would be highly useful for weather forecasting.

TIROS was equipped with two television cameras, with a magnetic tape recorder and with antennas. This simple configuration relayed thousands of pictures of the Earth's cloud cover, giving scientists the first real insight into the complexity of the Earth's atmosphere. When the first accurate weather forecasts based on data collected from TIROS were completed, it became obvious that this technology would revolutionize meteorology and that it would have long-lasting impacts on society.

To demonstrate its usefulness to the world and to fulfill President Dwight

D. Eisenhower's pledge to promote the peaceful use of space for the benefit of all mankind, NASA and the U.S. Weather Bureau invited scientists from 21 different nations to participate in the analysis of weather data from successive satellites.

It was due to this information that the Weather Bureau issued its first advisories on air pollution potential over the eastern United States. Today, weather forecasting is used in every part of our society. It is used to help protect human welfare and to guard against property damage; it is used to enhance commerce, and it is used to inform officials of dangerous environmental conditions like hurricanes and blizzards.

The technological advances that we have made since then in satellite technology have been astronomical, and the commercialization of this technology has brought us even more clarity about the world we live in than has ever been known or appreciated before.

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TIROS was only operational for 78 days, but those short weeks demonstrated the power and usefulness of space-based observations. It has been 50 years since the U.S. launched the first meteorological satellite into space, but as with other groundbreaking advances, it's appropriate to look back and appreciate the momentum that brought this Earth into the space age.

I urge my colleagues to support House Resolution 1231.

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

Ms. FUDGE. Mr. Speaker, I yield 5 minutes to the gentleman from New Jersey (Mr. HOLT).

Mr. HOLT. I thank the gentlewoman for yielding.

Mr. Speaker, I rise to urge my colleagues to support H. Res. 1231.

Let's review the technological, scientific, and political accomplishment that the TIROS I satellite represents.

In October of 1957, the launch by the Soviet Union of the Sputnik satellite struck fear in the hearts of Americans. Sputnik II went into space weighing over 1,000 pounds and carrying a dog. Meanwhile, the United States was developing far smaller satellites and experiencing troubles and public setbacks. On December 6, 1957, a Vanguard rocket failed to launch a U.S. satellite into space when it exploded on national television. In January 1958, the U.S. successfully launched a 31-pound Explorer I satellite, but even this victory was quickly followed by the loss of another Vanguard satellite in February. As the early space race continued through 1958 and 1959, the Soviet Union always seemed to be a step ahead of the United States.

The shock of Sputnik and the fear that the United States was losing its competitive edge inspired a national effort to prove and improve American leadership in the fields of science, math, and engineering. The U.S.

poured energy and resources into basic research and development as well as science, technology, engineering, and mathematics education. Less than 3 years after the launch of Sputnik, these investments were beginning to pay off. The usefulness of satellites to observe the Earth remained unproven, and by 1960, U.S. scientists and engineers had designed and built a new series of satellites to test the proposition and to demonstrate American dominance.

The first launch of TIROS in April of 1960 was a clear U.S. victory in the space race, and it was the world's first meteorological satellite and the first to relay video images of the Earth from above. TIROS represented a scientific milestone and a clear message to our rivals and to ourselves that we had an "eye in the sky" and we could watch the planet.

During the 78 days that it was in operation, TIROS I sent home almost 23,000 images, including those of a tropical storm, the cloud system of a large extratropical cyclone in the Gulf of Alaska, and the pack ice in the Gulf of St. Lawrence. Meteorologists used the transmissions to make the first accurate weather forecasts based on data gathered from space. The TIROS I program initiated a revolution in meteorological science and was the first step in the establishment of satellite storm tracking and warning systems that subsequently have saved countless lives. It proved that satellites could be useful tools for studying the planet and acquiring information to be used immediately for predictions and decision-making.

The design, the construction, the launch, and the operation of the TIROS I was carried out by a team from NASA, the U.S. Army Signal Corps, Fort Monmouth, the U.S. Weather Bureau, the U.S. Naval Photographic Interpretation Center, the Defense Advanced Research Projects Agency, Lockheed, Douglas, Martin Marietta. I am proud that central New Jersey can rightly claim a large share of the credit for TIROS I, which was engineered and manufactured in central New Jersey by RCA Astro-Electronics. One of the two command and data acquisition centers was located at Camp Evans. Many of the scientists and technicians and engineers who worked on this have recently gathered to celebrate this accomplishment.

But five decades later, it's too easy to take for granted the U.S. victory in the space race and the technological developments that were pioneered by TIROS and its successors. Most of us give little thought to the satellites that bring us our daily weather images. There's the story, perhaps apocryphal, of the politician who said, We don't need weather satellites when we have the Weather Channel. Well, we do. From solar cells and tape recorders to cell phone cameras and GPS systems, the contributions that derive from the TIROS program are not confined to outer space.

TIROS is a reminder of what we can achieve when we apply sufficient energy and resources to research and development in pursuit of a national goal. The story of TIROS should be a guide to rebuilding our economy. It's a blueprint for how we can create not just jobs but whole new industries. It's the story of how America remains competitive.

Let us honor this legacy by maintaining the urgent spirit of discovery and innovation embodied by the TIROS I team.

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

Ms. FUDGE. Mr. Speaker, I would just ask that my colleagues would support House Resolution 1231, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from Ohio (Ms. FUDGE) that the House suspend the rules and agree to the resolution, H. Res. 1231.

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

A motion to reconsider was laid on the table.

COMMEMORATING 400TH ANNIVERSARY OF FIRST USE OF THE TELESCOPE

Ms. FUDGE. Mr. Speaker, I move to suspend the rules and agree to the resolution (H. Res. 1269) commemorating the 400th anniversary of the first use of the telescope for astronomical observation by the Italian scientist Galileo Galilei.

The Clerk read the title of the resolution.

The text of the resolution is as follows:

H. RES. 1269

Whereas 2009 is the 400th anniversary of the first use of the improved telescope capable of astronomical observations by its developer, the Italian Renaissance scientist Galileo Galilei;

Whereas Galileo, born in Pisa, Italy, in 1564, was educated at the University of Pisa where he became Professor of Mathematics;

Whereas he attained life tenure as Chair of Mathematics at University of Padua;

Whereas Galileo was appointed Chief Philosopher and Mathematician to the Grand Duke of Tuscany, Cosimo de' Medici II, his patron;

Whereas Galileo had an integral role in the Scientific Revolution of the 17th Century due to his major contributions as a physicist, mathematician, astronomer, and philosopher;

Whereas Galileo is universally regarded as the "Father of Modern Astronomy", "Father of Modern Physics", and "Father of Modern Science";

Whereas his experiments on the laws of motion, falling bodies, and the parabolic paths of projectiles and his observations of astronomical bodies were scientific advances;

Whereas his inventions, the enhanced telescope; hydrostatic balance; geometric and military compass; thermoscope (thermometer); perfected compound microscope;