

Ms. FUDGE. Mr. Speaker, at this time, I would ask that my colleagues support H. Res. 1213.

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. 1213.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Ms. FUDGE. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX and the Chair's prior announcement, further proceedings on this motion will be postponed.

#### RECOGNIZING THE 50TH ANNIVERSARY OF THE LASER

Ms. FUDGE. Mr. Speaker, I move to suspend the rules and agree to the resolution (H. Res. 1310) recognizing the 50th anniversary of the laser.

The Clerk read the title of the resolution.

The text of the resolution is as follows:

##### H. RES. 1310

Whereas the invention of the laser was one of the groundbreaking scientific achievements of the 20th century;

Whereas in 1953, Charles H. Townes, along with graduate students James Gordon and Herbert Zeiger produced the first master device, which was a precursor to the laser that relied on microwave radiation instead of visible or infrared radiation;

Whereas concurrent to Charles H. Townes' activities, Nikolay Basov and Aleksandr Prokhorov of the Soviet Union independently produced a maser with significant technical advances which allowed continuous output;

Whereas Charles H. Townes, Nikolay Basov, and Aleksandr Prokhorov shared the 1964 Nobel Prize in Physics for their "fundamental work in the field of quantum electronics", which led to the construction of masers, and subsequently lasers;

Whereas in 1960, Theodore H. Maiman constructed the first functioning laser at Hughes Research Laboratories in Malibu, California, and the laser was first operated on May 16, 1960;

Whereas Theodore H. Maiman was the recipient of the 1983/1984 Wolf Prize in Physics for his realization of the first operating laser;

Whereas since being created in 1960, lasers have become an integral and essential part of our daily lives. Lasers can be found in a wide range of applications including in compact disc players, laser printers, barcode scanners, digital video devices (DVDs), industrial welders, and surgical apparatus, amongst others;

Whereas total global sales of lasers in 2010 is expected to top 5.9 billion dollars;

Whereas innovations flowing from basic research such as the laser have made America into the world leader in technology development;

Whereas continued support of scientific research programs is indispensable to maintaining America's position as the global leader in technology and innovation; and

Whereas LaserFest is a year-long celebration of the 50th anniversary intended to bring public awareness to the story of the laser and scientific achievement generally, and was founded by the following partners: the Optical Society of America, the American Physical Society, the International Society for Optical Engineering, and IEEE: Now, therefore, be it

Resolved, That the House of Representatives—

(1) recognizes the 50th anniversary of the laser; and

(2) recognizes the need for continued support of scientific research to maintain America's future competitiveness.

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. 1310, 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 in support of House Resolution 1310, which celebrates the 50th anniversary of the creation of the first laser.

The world's first laser was operated on May 16, 1960. It was constructed by Theodore Maiman at Hughes Research Laboratories in Malibu, California. This was a significant engineering and scientific feat.

Theodore Maiman's work was preceded by theoretical work by Charles Townes, James Gordon, Herbert Zeiger, Nikolay Basov, and Aleksandr Prokhorov. Townes, Basov, and Prokhorov won the 1964 Nobel Prize in Physics for their work.

One of the peculiarities of the achievement of the invention of the laser is that, for many years after its creation, the laser was an invention without many practical applications. However, as time went on, scientists and engineers recognized the incredible potential of the laser. Today, the laser is almost ubiquitous. It can be found in almost every home, office, and automobile in America. Lasers are also big business, with annual laser sales approaching \$6 billion per year, and growing.

The story of the laser is illustrative of how investments in basic R&D can have huge economic and scientific implications down the road. It is a story to remember well as this Congress prepares to take up the America COMPETES Reauthorization Act in the coming weeks.

I would like to take a moment to recognize the sponsor of this resolution, Dr. VERN EHLERS. It is my under-

standing that, in a prior life, Dr. EHLERS knew one of the persons cited in this resolution, Dr. Townes, so it is especially fitting that he is the sponsor.

Mr. Speaker, I urge my colleagues to support the resolution, and I reserve the balance of my time.

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

Mr. Speaker, H. Res. 1310 celebrates the 50th anniversary of the construction of the laser, marking a major milestone in scientific discovery.

In 1953, Charles Townes produced what would become a precursor to the laser—the first microwave amplifier. Townes and his colleagues teamed up with Bell Laboratories in 1957 to begin extensive research on the amplification devices. Their focus shifted only to those amplifiers which produced visible light. In 1958, Bell Laboratories submitted a patent for an optical laser. However, such a device had yet to be successfully created. It was not until Charles Townes and Gordon Gould met in 1958 that the fundamentals of the laser and of the open resonator design were first discussed. In 1960, Theodore Maiman constructed the first operational laser. He used theories and plans published by Bell Labs, Gould, and Townes to construct this remarkable device.

Charles Townes was later awarded the Nobel Prize for Physics, along with scientists Nikolay Basov and Aleksandr Prokhorov, for their work in quantum electronics, which laid the groundwork for the construction of lasers.

We rely on lasers in our daily lives, and they are found in everyday products, such as laser printers, barcode scanners, and numerous medical devices. The world sales of lasers are estimated at well over \$5 billion to date.

Today, in large part, we realize that great success stories, such as the construction of lasers, are due to American ingenuity, which stems directly from the investment in basic research and in our outstanding institutions of higher learning. The laser is a prime example of basic research that ended up having multiple applications well beyond what its creators could have ever conceived.

The construction of the laser is but one example that leaves me confident in America's place at the top of the scientific world. I applaud these great scientists for their contributions to our community, and I urge my colleagues to do the same.

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

Ms. FUDGE. Mr. Speaker, I would just ask that my colleagues support this resolution, H. Res. 1310, 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. 1310.

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