

funding to 14-multidisciplinary University Research Centers (URCS) at minority institutions, and he facilitated the integration of HBCUs and OMUs into conventional mainstream research programs at NASA.

As led by Administrator Goldin, NASA and the Congressional Black Caucus partnered successfully to expand educational opportunities for minorities in science, mathematics and engineering to increase the presence of minorities in research and technology-related fields.

In addition to initiating the "faster, better, cheaper" approach that enabled NASA to deliver programs of high value to the American public without sacrificing safety, his aggressive management reforms helped to produce a 40 billion dollar reduction from prior budget plans.

He reduced NASA's workforce by about a third while reducing the Headquarters' workforce by more than half, without resorting to forced layoffs—all of this with a 40% gain in productivity.

Mr. Goldin implemented a more balanced aeronautics and space program by reducing human space flight from 48% of the Agency's total budget to 38%.

He also played a pivotal role in redesigning the International Space Station and in 1995, he personally visited more than 200 members on Capitol Hill to win support for Space Station.

Defense Business named Mr. Goldin as one of the world's most influential defense-industry leaders saying "he has tightened the workforce, introduced a stunning array of new missions, including information-gathering journeys to the Moon and Mars, and became the major player in the embryonic International Space Station."

He has also been named as one of the 100 most influential men and women in Government by the National Journal, which observed that "most space watchers say that Dan Goldin is a brilliant visionary who brought NASA back from the brink of a black hole."

Once again, the members of the Congressional Black Caucus, recognize the enduring contributions of Administrator Daniel S. Goldin and appreciate his dedication to the improvement of science, engineering, and mathematics education and research, among minority students in the United States.

#### TRIBUTE TO JAMES D. RUTH

### HON. GARY G. MILLER

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

*Tuesday, December 18, 2001*

Mr. GARY MILLER of California. Mr. Speaker, it is with great pleasure that I rise to honor James D. Ruth who is retiring after 22 years of exemplary service to the City of Anaheim and 45 years in public service.

Mr. Ruth's impressive resume includes numerous noteworthy accomplishments. Under his tenure as city manager, Anaheim became internationally recognized as a hub for entertainment and for its world class convention center. His crowning achievement was the role he played in negotiations for the construction of the 19,500-seat Arrowhead Pond arena,

which has affectionately been called "the house that Ruth built," and his work with the Walt Disney Company to bring the Mighty Ducks of the National Hockey League to the Pond.

Mr. Ruth was very instrumental in the \$118 million renovation of Edison Field, and thereby the retention of the Anaheim Angels and Major League Baseball in Orange County. He negotiated with the Walt Disney Company to develop in Anaheim their new theme park, California Adventure, at cost of \$1.4 billion. In conjunction with the park expansion, the city initiated and began the implementation of a \$510 million improvement program to the Anaheim Resort Area and a \$1.9 billion renovation of the Santa Ana (I-5) Freeway. Revitalization projects provided low income housing in the Jeffrey-Lynne neighborhood west of Disneyland, a \$58.2 million Community Center, and a much needed Senior Center.

Mr. Ruth's vision, outstanding business and governmental acumen, strong leadership skills and dedication to public service have earned the admiration and respect of those who have had the privilege of working with him. I would like to congratulate him on these outstanding accomplishments and sincerely thank him for his exemplary record of service to the City of Anaheim.

#### DEFENDING AMERICA FROM BALLISTIC MISSILE ATTACKS

### HON. BOB SCHAFFER

OF COLORADO

IN THE HOUSE OF REPRESENTATIVES

*Tuesday, December 18, 2001*

Mr. SCHAFFER. Mr. Speaker, we need to defend our country from ballistic missile attack. President Bush has taken a major step toward that goal by withdrawing from the 1972 ABM Treaty. President Bush has our sincere thanks and congratulations for removing the United States from a treaty that inhibited our defense and was repeatedly violated by Russia.

We need to act decisively to build a ballistic missile defense. The fact that our country is undefended from ballistic missiles is a reflection of our lack of political will to build a defense. The technology for a ballistic missile defense is available, and has been for years and even decades, as noted by the Director of the Strategic Defense Initiative Organization under President George H.W. Bush's administration.

I strongly urge the President to fully fund a robust ballistic missile defense program encompassing a variety of technologies and defenses. A robust defense made up of several layers will more easily guard against countermeasures such as those planned by China to attack U.S. radar and communication nodes, or by Russia to use ballistic missiles for launching hypersonic scramjets.

Full funding for a robust ballistic missile defense will call for increases in spending. This spending is justified. Our lack of ballistic missile defense is not justified. Freedom has a price, including a strong defense, and the ballistic missile threat is increasing, whether measured by North Korea's ballistic missile

program, or China's buildup involving its road-mobile DF-31 ICBM.

Funding, for example, needs to be increased for the Space Based Laser program. Instead of being funded annually at between \$50–150 million, the Space Based Laser should be funded an order of magnitude greater at \$500–1500 million. This increase in funding will enable the Space Based Laser to be tested and deployment begin sooner than after 2010 as currently scheduled.

Lack of funding, not technology, keeps us from building a constellation of Space Based Lasers. In 1995, three major aerospace contractors wrote to the Chairman of the Senate Armed Services Committee, STROM THURMOND, on the Space Based Laser, pointing out how additional funding of approximately \$1.5 billion over four years could result in a test launch of a Space Based Laser.

While this estimate for testing the Space Based Laser in space was prepared nearly seven years ago, it clearly illustrates how the level of funding for the Space Based Laser should be on a billion-dollar level rather than \$50–150 million. (The Space Based Laser, with its boost phase interception capability and global coverage, will provide a more effective defense compared to the Mid Course Phase ground-based interceptor currently under development.)

Additional money for research and development into other high-energy laser technologies is called for. In October 2001 key defense scientists recommended a substantial cash infusion into laser technology. Over and above funding for the Space Based Laser, additional funding is needed for research into high-energy lasers. These lasers could include chemical gas lasers such as the DF laser (the Space Based Laser uses an HF chemical reaction), excimer and free electron lasers, or even solid-state lasers. Nor should high-energy particle beams be neglected, which showed promise in the 1989 BEAR experiment. (Particle beams as well as lasers can provide effective mid-course phase discrimination of decoys from warheads.) This research into lasers and particle beams would be invaluable, and result in commercial applications. Funding, similar to the Strategic Defense Initiative, should be on a billion-dollar level.

In addition, funding is needed to re-start the Brilliant Pebbles space-based interceptor program that was successfully ground-tested under President George H.W. Bush's administration, and successfully flight-tested in the Clementine lunar mission. Annual funding for this program should be expected at around \$500–1500 million to deploy a constellation of at least a thousand interceptors. Brilliant Pebbles can provide a boost phase interception capability, as well as mid-course phase interception. This space-based defense is not far off into the future, but was approved to enter its acquisition phase under the Bush Senior administration in 1992. To supplement the mid-course interception capability of Brilliant Pebbles, funding for the SBIRS-low constellation of missile launch detection and tracking satellites should be accelerated.

The funding increases needed for ballistic missile defense are in line with any other major arms acquisition program. But the political will is now needed to ask for this funding.