



John H. Gibbons

JOHN H. (JACK) GIBBONS

1929–2015

Elected in 1994

“For leadership in a broad spectrum of initiatives toward the development and communication of national policies for technological issues.”

BY SAM BALDWIN, ROSINA BIERBAUM, JOHN HOLDREN, AND MAXINE SAVITZ

JOHN HOWARD GIBBONS died at age 86 on July 17, 2015. He leaves a legacy of unparalleled leadership in science and technology policy for the nation as director of the Congressional Office of Technology Assessment (OTA) and as science advisor to President Bill Clinton and director of the White House Office of Science and Technology Policy (OSTP). His mentoring of staff at OTA and OSTP also contributed to the development of a legion of science policy experts across the United States. As Vice President Al Gore said, “He was utterly unique and irreplaceable.”

Jack was born January 15, 1929, in Harrisonburg, Virginia. With a love of nature and hiking, he ran a Boy Scout camp when he was 13 and became an Eagle Scout and a member of scouting’s national honor society, the Order of the Arrow. He graduated from Randolph-Macon College in 1949 with bachelor’s degrees in mathematics and chemistry and got his PhD in physics from Duke University in 1954.

His career began in 1954 as a nuclear physicist at Oak Ridge National Laboratory (ORNL), Tennessee, where he studied the role of neutron capture in the stellar nucleosynthesis of heavy elements and ultimately became the group leader for nuclear geophysics. With coworkers, he founded Ortek, a company that produced radiation detectors and other instruments and

was later sold to EG&G Corporation. From 1969 to 1973 he was director of the ORNL Environmental Program, where he initiated and directed research on energy efficiency in buildings, transportation, and electricity as well as on the environmental impacts of energy supply and resource use.

Jack was named the first director of the Federal Office of Energy Conservation by President Richard Nixon in September 1973, just before the oil embargo started in October 1973. In response, he launched the first national campaigns to reduce oil use and promote energy independence and security.

He returned to Oak Ridge in late 1974 as professor of physics and director of the Energy, Environment, and Resources Center at the University of Tennessee, where he focused on energy management, energy efficiency, and the environmental impacts of energy production and use. He was one of a handful of academic leaders then initiating and building interdisciplinary energy and environmental programs at universities around the country.

In 1979 he went back to Washington to lead OTA, an independent, bicameral, nonpartisan agency that provided analysis for the Congress and the nation of the benefits, costs, and risks of available approaches to the scientific and technological challenges facing society. Under his leadership (1979–1993), OTA researchers generated more than 500 reports on agriculture, biotechnology, energy, environment, health, information technology, national security, space, transportation, and other topics of national interest.

Many of OTA's reports had significant impacts on congressional debates. Indeed, Jack's intent was to have every side build from the same, well-grounded foundation of scientific information and technological insight, raising the level of political discourse. He wanted OTA reports to be "policy relevant, but never policy prescriptive." He considered the analysis to be only half the work; translating the data and analysis into usable information and communicating it effectively was the other half.

Jack built OTA into an immensely productive, influential, and widely respected source of policy-relevant science and

technology insight, not just for Congress and the nation but for the world. Two years after he left OTA, the agency was dissolved in a contentious budget-cutting move that was lamented by many on both sides of the aisle. Amo Houghton (R-NY) even wrote an “In Memoriam” piece in observance of its closure.¹

For years after OTA’s untimely demise, Jack’s presence in a Congressional hearing room would give rise to members’ laments about the loss of the “think tank” that helped them evaluate the consequences of legislation involving science and technology. The agency’s legacy lives on, however, for the work of OTA became a global model; the European Parliamentary Technology Assessment network, for example, was established in 1990 and now comprises 20 member countries.

In February 1993 President Clinton appointed Jack assistant to the president for science and technology and director of OSTP, positions he held until 1998. He also served on the National Security Council, Domestic Policy Council, and National Economic Council; cochaired the President’s Committee of Advisors on Science and Technology (PCAST); and initiated and oversaw the National Science and Technology Council, providing integrated science and technology budgets across all federal agencies.

Jack had extraordinary impact. He focused attention on funding for energy research, development, and demonstration; new initiatives in biomedical research; and the establishment of the National Bioethics Advisory Commission. He was an effective advocate for the Comprehensive Test Ban Treaty to halt the development of new nuclear weapons, which President Clinton signed in 1996. He promoted the International Space Station as a global initiative that included the Russians, encouraging engagement with them during a period of dramatic change in that country. He was a leader in US cooperation with Russia to keep nuclear materials safely stored.

¹ Published in the *Congressional Record*, Extension of Remarks, Sept. 28, 1995, pp. E1868–E1870.

He initiated the Partnership for a New Generation of Vehicles, which developed high-efficiency hybrid vehicles. He was the first OSTP director to create a division focused on the environment, complementing the Divisions on Science, Technology and Innovation, and National Security and International Affairs. He oversaw the first National Climate Assessment, which he had successfully encouraged Congress to endorse in legislation (he later reminded his staff that “we have to be careful what we wish for, we might need to implement it!”). And he led US engagement on science and technology with other governments around the world.

After leaving the White House in April 1998, Jack served as the Karl T. Compton Lecturer at MIT (1998–1999); senior advisor to the US Department of State (1999–2001), where he assisted the secretary in revitalizing science and technology capabilities, including creating the position of science advisor to the secretary; president of Sigma Xi (2000–2001); board chair of Population Action International; and member of the Virginia Commission on Climate Change (2008), among others. Overall, he served on nearly 20 advisory and working committees of the National Academies, and on nearly 60 other civic and professional boards and advisory groups. He chaired the Demand/Conservation Panel of the National Academies’ Committee on Nuclear and Alternative Energy Systems (CONAES) (1976–1979). The panel’s report made the case, then controversial, that US energy efficiency could double over 35 years; it did.

He was also one of the first signers of the 2004 Scientist Statement on Restoring Scientific Integrity to Federal Policymaking, continuing his lifelong emphasis on the importance of scientific integrity as a buffer to political expediency.

Jack’s work was recognized at the highest levels. In addition to being a member of the NAE, he was a fellow of the American Physical Society (APS), American Association for the Advancement of Science (AAAS), and American Academy of Arts and Sciences. Among his many honors, he was awarded the APS Leo Szilard Award for Physics in the Public Interest; the AAAS Philip Hauge Abelson Prize for

sustained exceptional contributions to advancing science; the Federation of American Scientists Public Service Award; the Alliance to Save Energy Lifetime Achievement Award; the NASA Distinguished Service Medal; medals from the French and German governments for fostering scientific cooperation; honorary doctorates from half a dozen universities; and he was the inaugural honoree in the Energy Efficiency Forum Hall of Fame.

He demonstrated by example the value of science to inform policy and the importance of careful analytical work. He believed his key job was to “speak truth to power,” and he did so effectively, with a folksy style and humor that defused tension when some did not want to hear the message. When he took up his position in the Clinton/Gore administration, *Scientific American* titled his profile “The Nicest Guy in Washington”—and that was after he’d worked for Congress for 13 years.

He was unflappable even under the pressures for which Congress and the White House are legendary, and he was articulate in explaining not just the science and technology around a given issue but also the policy and ethical dimensions.

He was also known for a wry sense of humor often conveyed in one of the innumerable quotes he knew by heart. As he warned about the dangers of climate change, for example, he observed that “Americans never see the handwriting on the wall until their backs are up against it” (Adlai Stevenson), and “If we don’t change our direction we’re likely to end up where we’re headed” (Chinese proverb).

When his daughter Ginny asked “How do you remain so optimistic when the world is falling apart?” he said, “There is no other choice.” And when she asked how he was able to maintain his sense of humor in the face of world calamities, he said, “Laughter is often just a step away from despair.” An engraved stone on his desk reflected his determination, reading “*Illegitimi non carborundum*,” loosely translated as “Don’t let the bastards grind you down!”

Jack had a deep commitment to mentoring the lay public as well as presidents and members of Congress. He gave countless

lectures to garden clubs, junior colleges, Rotary clubs, scout troops, and church congregations with zeal equal to that of his congressional testimonies, briefings to the Cabinet, and plenary lectures to science societies. He was a true “civic scientist” and mentored all staff he worked with about the importance of this responsibility. He was indefatigable in his mentoring of aspiring young scientists, engineers, and policy analysts, spending countless hours helping them chart their courses and regaling them with the lessons he had learned from decades of working at the science-policy interface.

Most important, Jack was a good-hearted, decent person. Always a gentleman, he was humble, kind, generous, and witty. He was full of life and his family was always surrounded by friends. His wife Mary Ann (née Hobart) remembers that he could chat with anyone, and that he would often adopt the accent of whomever he engaged in conversation, especially in the Tennessee mountains, such as “You-uns come back soon, hear!” His daughter remembers “lazy summers filled with lovely cocktail parties outside accompanied by laughter, lightning bugs, and George Shearing jazz in the background.”

Jack loved music and had a rich bass singing voice. He met Mary Ann in a choir and they sang together for as long as he lived. Music was a constant part of family life; his daughters remember Jack singing in the quartet of a local Oak Ridge production of “The Music Man,” and by the end of all the rehearsals the entire family could practically play all the parts. When he interviewed for the science advisor position with President Clinton and Vice President Gore in Arkansas on Christmas Eve 1992, he made it back to Virginia in time to perform in his church’s evening service. He even played the washtub and sang at the memorable OTA holiday parties each year.

Jack’s love of nature and adventure pervaded his life. He took Mary Ann spelunking on one of their first dates; fortunately his brother William was along to help extricate her from a particularly difficult passage. In his 70s he could outpace hikers half his age in the mountains of Colorado, on the beaches of Maine, or in the forests of Virginia. He spent

countless hours caving, hiking, and pondering how to leave this Earth a better place than he found it.

He is survived by his wonderful wife of 60 years, Mary Ann; daughters Virginia Barber and Mary Marshall Meyer; his sister Dr. Elizabeth Reynolds; and eight grandchildren. Daughter Diana C. Gibbons passed away in 2014.