

U.S. House of Representatives Committee on Science, Space, and Technology

Oversight Plan for the 112th Congress

House Rule X sets the Committee's legislative jurisdiction while also assigning broad general oversight responsibilities (Appendix A). Rule X also assigns the Committee special oversight responsibility for "reviewing and studying, on a continuing basis, all laws, programs, and Government activities dealing with or involving non-military research and development." The Committee appreciates the special function entrusted to it and will continue to tackle troubled programs and search for waste, fraud, abuse, and mismanagement, in non-military research and development programs regardless of where they may be found.

Much of the oversight work of the Committee is carried out by and through the Investigations and Oversight Subcommittee. However, oversight is required for and necessarily built into every Subcommittee and the full Committee. All elements of the Committee take their oversight charge seriously, and those elements have worked cooperatively in the past, as they will in the future, to meet our oversight responsibilities.

The Committee also routinely works with the Government Accountability Office (GAO) and the Inspectors General of our agencies to maintain detailed awareness of the work of those offices. The Committee currently has numerous outstanding requests with the GAO and more will be developed in the coming weeks and months. Many of these requests are bipartisan, having been signed by both the Chairmen and Ranking Members of our Committee and Subcommittees, or include multiple Committee Chairmen where there are shared interests. The Committee also works collaboratively with the National Academies of Science, the Congressional Research Service, the Office of Government Ethics, and the Office of Special Counsel, as well as various other independent investigative and oversight entities.

Oversight is commonly driven by emerging events. The Committee will address burgeoning issues and topics as they transpire. Nevertheless, the Committee feels that the work contained in this plan reflects an accurate portrayal of its oversight intentions as of January, 2011.

Space and Aeronautics

National Aeronautics and Space Administration (NASA) human space flight program The Committee will continue to provide oversight of NASA's human spaceflight program as it undergoes a period of uncertainty and transition following various Administration proposals. Specific attention will be paid to the feasibility of NASA's plans and priorities relative to their resources and requirements.

Federal Aviation Administration (FAA) Commercial Space Transportation

FAA's Office of Commercial Space Transportation (OCST) licenses commercial launch vehicles. An area of increasing interest is the emergence of a number of fledgling commercial human suborbital space flight ventures. In addition to its oversight of the FAA's OCST, the Committee will examine the progress of the emerging personal space flight industry, as well as the challenges it faces.

NASA Earth and Space Science

The Committee will monitor NASA's efforts to prioritize, plan, launch, and operate space and earth science missions with cost and schedule. Particular attention will be paid to programs that exceed cost estimates to ensure they do not adversely impact the development and launch of other missions. The Committee will also examine the impact of large increases in funding for the Earth Science Directorate relative to funding requested for other science diciplines.

FAA Research and Development (R&D) activities

The Committee will oversee the R&D activities at the FAA to ensure that they lead to improvements in FAA mission performance. The Committee has a particular interest in the performance of the Joint Planning and Development Office (JPDO), and FAA's management of its Next Generation Air Transportation System (NextGen) program.

Commercial Orbital Transportation Services (COTS)

The Committee will evaluate the ability, cost, safety, and reliability of commercial providers to meet NASA requirements to deliver cargo and crew to the ISS.

Space Shuttle transition

As the Space Shuttle retires, the Committee will monitor the transition of its highly skilled workforce to other programs and projects, as there is potential for major workforce transition issues.

International Space Station (ISS) utilization and operation

The plans for operation and utilization of the ISS will continue to draw the Committee's attention as NASA attempts to fully utilize the unique research opportunities that the facility offers, while exclusively relying on logistical services from commercial and foreign providers. Given the significant national investment to date in the facility,

Congress has directed that NASA maintain a strong research and technology program to take advantage of ISS's unique capabilities.

Aeronautics Research

An important area for oversight will be NASA's aeronautics research and development program. The Committee plans to examine NASA's ability to support the interagency effort to modernize the nation's air traffic management system, as well as its ability to undertake important long-term R&D on aircraft safety, emissions, noise, and energy consumption - R&D that will have a significant impact on the quality of life and U.S. competitiveness in aviation.

NASA contract and financial management

A perennial topic on GAO's high risk series, NASA financial management will continue to receive attention from the Committee. The Committee will also monitor NASA's contract management to ensure acquisitions are handled appropriately.

Near Earth Objects

Congress provided guidance to NASA relating to Near Earth Objects in its last two authorization bills. The Committee will continue to monitor NASA's compliance with that direction, as well as determine whether additional oversight is necessary.

Within the Space and Aeronautics Subcommittee's jurisdiction, activities warranting further review include costs associated with cancellation of the Constellation program, NASA's approach to develop and fund a successor to the Space Shuttle, and investment in NASA launch infrastructure. NASA has not clearly articulated what types of future human space flight missions it wishes to pursue, or their rationale.

Energy and Environment

Department of Energy (DOE) Office of Science

DOE plays a leading role in supporting basic research in the physical sciences and driving long-term innovation and economic growth. The Committee will conduct oversight of Office of Science programs to review prioritization across, and management within, its major program areas. Special attention will also be given to the cost, operation, and maintenance of DOE's existing and planned major facilities.

National Laboratories

The Committee will continue to oversee the Department's laboratory complex, which provides a wide range of important R&D capabilities. The management and upkeep of the national laboratories' aging facilities, particularly the clean-up of radioactive and hazardous material sites, remains a continuing concern for the Committee. Efforts will continue to assure that the government meets its responsibilities to control risks in and around these facilities.

DOE Office of Energy Efficiency and Renewable Energy (EERE)

After recently receiving significant increases in funding, the Committee will provide close oversight to ensure that programs are managed efficiently, duplication is limited, and funding was allocated appropriately and effectively.

Fossil Energy R&D

Fossil energy will remain a crucial aspect of our energy portfolio for the foreseeable future. In the 112th Congress, the Committee will continue to ensure that fossil fuel R&D programs are appropriately focused and managed efficiently. Expected areas of oversight include carbon capture and sequestration activities (including FutureGen) and oil and gas R&D efforts.

DOE loan guarantees

Large increases in funding for DOE loan guarantees necessarily call for greater attention by the Committee. Ensuring the funding is appropriately prioritized and spent effectively will be a priority in the 112th Congress.

Fusion

Technical challenges have hampered our ability to harness nuclear fusion as an energy source. The Committee will continue to monitor progress toward nuclear fusion, specifically international cooperation and progress in the International Thermonuclear Energy Reactor (ITER).

DOE Contract Management

DOE programs have come under frequent scrutiny for contract management practices. GAO designated DOE's contract management as high-risk in 1990 and continues to identify areas of potential waste, fraud, and abuse.

Nuclear R&D

The Committee will provide oversight of the nation's nuclear R&D activities with the goal of unleashing the unlimited potential of emissions-free energy. DOE, the Nuclear Regulatory Commission, and the power industry hope to accelerate reactor construction as soon as possible. The Committee will examine how DOE R&D can best contribute to this goal through the advancement of various nuclear energy technologies.

Science and R&D at the Environmental Protection Agency (EPA)

The Committee will continue to provide oversight of EPA's management of science, and its use of science in the decision making process, including the evaluation of quality assurance measures. In particular, the Committee will examine how to better integrate science into the Administration's regulatory decision-making process. EPA's decisions affect every state in the Union and we must demand that EPA's actions are supported by valid and complete science.

EPA Laboratories and Libraries

The Committee will evaluate the effectiveness and utility of EPA resources and infrastructure to ensure the Agency can fully meet its statutory requirements.

Oil Spill Response and Recovery

The Committee will continue its oversight of the cause and impact of the oil spill, as well as the response and recovery efforts associated with the accident. Oversight efforts will build upon the various independent investigations including the President's National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling Report, as well as reports from other entities such as the National Academies.

Federal climate research activities

The Committee will continue to monitor programs to address climate change issues across the Federal government to ensure that existing programs are necessary, appropriately focused, effectively coordinated, and properly organized to prevent duplication of efforts and waste taxpayer resources. We must also insist that decisions on climate activities are based on solid and thorough science.

Federal ocean research activities

The Committee will evaluate the President's National Policy for the Stewardship of the Ocean, Coasts, and Great Lakes, which adopted the Interagency Ocean Policy Task Force recommendations aimed at addressing the future of our oceans. The Committee will monitor the implementation of this plan, as well as Federal oceans R&D policy generally.

Specific areas of interest within the Energy and Environment Subcommittee's portfolio warranting further review include major projects and facilities construction at the Department of Energy and accounts receiving significant recent increases, such as interagency climate science activities, EPA research programs, and DOE energy efficiency and renewable energy technology development programs.

Technology and Innovation

Department of Homeland Security (DHS) Science and Technology

The Committee will continue to monitor the maturation of DHS, particularly the reorganization of the Science and Technology Directorate, and the research and technology programs associated with the Domestic Nuclear Detection Office.

National Institute of Standards and Technology (NIST) reorganization

The Committee will conduct program oversight for NIST, and other programs in the Department of Commerce, paying special attention to the evaluation of their impact on the private sector. The Committee is aware that the nation's competitive position can be dramatically improved, or weakened, depending on how standards for different products and processes are developed. NIST is the only federal agency with long-term expertise working in this arena, and the Committee is concerned that the cooperation on standards development across agencies is less than optimal. It is the Committee's intention to review the government's role in standard setting with a focus on collaboration across Federal agencies.

Department of Transportation (DOT) R&D programs

The Committee will conduct oversight with regard to surface transportation R&D programs within the federal government, particularly focused on effectiveness and redundancy.

American economic competitiveness

The nation faces a challenge for economic and technological preeminence. The Committee will evaluate steps to reduce federal barriers to domestic and international competitiveness for U.S. companies.

Technology transfer

The Committee will seek recommendations for continued improvements in the technology transfer incentives built into law by the Bayh-Dole and Stevenson-Wydler acts and the Small Business Innovation Research program.

US Fire Administration

The U.S. Fire Administration is responsible for the Assistance to Firefighters grant program, and the Committee has closely monitored the direction of this program as the organizational structure of the Department has coalesced. Continuing attention is important to assure first responders have the necessary support and training.

Natural hazards monitoring and impact reduction

The Committee has supported interagency research programs to identify improvements in building and infrastructure designs to protect and provide early warning for natural disasters. Evaluating further needs for these and other hazard types is ongoing.

Cybersecurity

The Committee has continuously stressed the protection of the nation's cyber-infrastructure, underpinning economic and public services. The Committee will continue to provide oversight of how NIST and DHS address this important topic.

Health information technology

Real improvements in the cost and accuracy of health care can be achieved through enhanced integration of health data with IT systems. NIST has a critical role to play through setting standards that will protect patient privacy and minimize private sector waste. The Committee has been active in this area and will continue to work to ensure that the Nation realizes the gains in efficiency and safety implicit in an effective roll out of Health IT.

Within the Technology and Innovation's Subcommittee's jurisdiction, there are several activities supported by the National Institute of Standards and Technology (NIST) which would be better supported by the private sector. Among them is a grant program for building construction at universities and nonprofit organizations. There are also other programs administered by the Department of Commerce and Department of Transportation which could be streamlined and refined. The Committee will ensure that all funding for these programs is awarded competitively and only renewed after performance is assessed. In the area of economic competitiveness, the Committee must ensure that the Small Business Innovation Research Program is focused on innovations that industry finds too risky to invest in and to increase oversight of outcomes of program and consider reductions. Finally, there are substantial federal funds being provided for staffing local fire personnel that need to be examined as to whether this is a more appropriate role for local communities to support.

Research and Science Education

National Science Foundation (NSF)

The Committee will continue to oversee the NSF. With the recent reauthorization of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act, special attention will be paid to the implementation, execution, and effectiveness of these new programs. While supportive of the overall goals of the legislation, there are concerns with several add-ons, especially those that were added to the bill without the proper legislative process. Further, the Committee will look for ways to trim duplicative and unused programs in an effort to maximize available resources.

Science, Technology, Education and Mathematics (STEM) K-12 oversight STEM education is a vital component in the evolving economy. Members of the Committee have expressed interests in improving STEM education activities from pre-K through graduate education and beyond, in order to cultivate a top-notch future scientific and technical workforce, including well-qualified teachers in STEM fields. Determining the appropriate forms of federal support to achieve these outcomes will be of great importance to the Committee.

Academic/Industry Partnerships

The Committee will review the effectiveness and consequences of academic/industry partnerships. Agencies and universities are again debating the level of scrutiny and control that should be applied to research in light of the possible use of new findings by adversaries. At the same time, industry questions the value of controls on technology sales and argues that such controls disproportionately limit American firms in competition for global sales. How to fairly balance these competing interests remains a perennial subject for Committee oversight.

U.S. Antarctic and Arctic Programs

The U.S. has conducted operations on the Antarctic continent under the terms of the Antarctic Treaty System since 1959, and U.S. research activities in the Arctic predate that. The NSF serves as the steward for U.S. interests in Antarctica. Research in these extreme regions is a fundamental component to understanding the Earth and its systems. The future of the icebreaker fleet that provides vital logistical support for NSF activities in the harsh polar environments continues to be of concern.

NSF Major Research Equipment and Facilities Construction (MREFC) program
The Committee will continue to monitor and oversee NSF's MREFC program, including
how priorities for projects are developed, long-term budgeting for such priorities, and
decision-making with regards to ever-changing scientific community needs.

Government-wide R&D initiatives in emerging fields

The Committee will continue to oversee the collaboration and interagency process associated with emerging fields such as networking and information technology, biotechnology, cybersecurity, and nanotechnology,

The innovative work of the National Science Foundation is important to the economic prosperity and competitiveness of the United States. However, there are various activities within the Foundation that may go beyond the mission of the agency and require more scrutiny and potential cuts in order to ensure that federal investments in basic science remain primarily focused on actual research of benefit to the Nation. Likewise, while STEM education is critical to maintaining the scientific and technical workforce essential to our competitiveness, many duplicative, wasteful, or simply unused programs exist across a number of federal agencies and must be more closely examined and, where warranted, adjusted.

Investigations and Oversight

Yucca Mountain Nuclear Waste Repository closure decision

The Committee will evaluate DOE's decision to close the Yucca Mountain Nuclear Waste Repository.

NOAA satellite modernization

The Committee will continue its close monitoring of satellite modernization at the National Oceanic and Atmospheric Administration (NOAA). The restructuring of the National Polar-orbiting Environmental Satellite System (NPOESS), and the creation of the Joint Polar Satellite System (JPSS) will continue to draw the Committee's attention, as well as the Geostationary Operational Environmental Satellites, and the broader issues of research-to-operations planning and data continuity.

Critical minerals, materials, and isotopes

The Committee will provide oversight of materials, minerals, and isotopes that are critical to U.S. national interests. Recent shortages and supply concerns associated with helium-3, rare earth elements, californium-251, and plutonium-238 highlight the need to be ever vigilant in our monitoring of critical materials, mineral, and isotopes.

American Recovery and Reinvestment Act (ARRA) oversight

The Committee will provide oversight of funding associated with ARRA to ensure that waste, fraud, abuse and mismanagement is minimized, and to evaluate whether funding was aligned to achieve agency mission objectives through measureable outcomes.

Risk assessment

As the number and complexity of regulations increases throughout federal and state governments, the risk assessments that inform those decisions are garnering more attention. The Committee will continue to oversee how risk assessments are developed and how they are used in the regulatory process to ensure that policies are based on the best science available.

Scientific integrity

The Committee will continue to collect and examine allegations of intimidation of science specialists in federal agencies, suppression or revisions of scientific finding, and mischaracterization of scientific findings because of political or other pressures. The Committee's oversight will also involve the development and implementation of scientific integrity principles within the executive branch.

Additional Science Activities

Pursuant to House Rule X, the Committee will review and study on a continuing basis laws, programs, and Government activities relating to non-military research and

development. This will include agencies both in, and out, of the Committee's legislative jurisdiction.

Agency compliance with Congressional directives and requests

The Committee will be ever vigilant in its oversight to ensure that recent authorization acts, appropriation acts, and other congressional directions are complied with appropriately.

Emerging Issues

Additional matters as the need arises and as provided for under House Rule X, clause 3(k).

Collaboration

The Committee maintains a rich relationship with its Inspectors General, the Government Accountability Office (GAO), the National Academies of Science, the Congressional Research Service, the Office of Government Ethics, and the Office of Special Counsel, as well as various other independent investigative and oversight entities. The Committee will continue to work with those offices, relying on them to identify major mismanagement issues, using their reports in hearings, and working with the High Risk Series published by GAO to guide hearings and inquiries. The Committee already has several outstanding requests, many of which are bipartisan or cross-Committee, which reflects the collaborative nature of much of the Committee's oversight work.

The Committee also welcomes input from the public and whistleblowers. The Committee has developed many relationships with whistleblowers in agencies. The Committee has taken positive steps to try to protect them from retaliation and has been reasonably successful in that role. Most of the whistleblowers who come to the Committee remain anonymous – sometimes even from the Committee.

The Committee will retain its open-door policy regarding whistleblowers, whether they are contractors or government employees, and they should rest assured that we will never betray a confidence. Even if the information offered turns out not to be useful, as sometimes happens, the Committee will remain a haven for such figures and we understand the absolute necessity for citizens to feel safe in their communications with Congress.

Appendix A

House Rule X

ORGANIZATION OF COMMITTEES

Committees and their legislative jurisdictions

- 1. There shall be in the House the following standing committees, each of which shall have the jurisdiction and related functions assigned by this clause and clauses 2, 3, and 4. All bills, resolutions, and other matters relating to subjects within the jurisdiction of the standing committees listed in this clause shall be referred to those committees, in accordance with clause 2 of rule XII, as follows:
- (p) Committee on Science, Space, and Technology.
- (1) All energy research, development, and demonstration, and projects therefor, and all federally owned or operated nonmilitary energy laboratories.
- (2) Astronautical research and development, including resources, personnel, equipment, and facilities.
- (3) Civil aviation research and development.
- (4) Environmental research and development.
- (5) Marine research.
- (6) Commercial application of energy technology.
- (7) National Institute of Standards and Technology, standardization of weights and measures, and the metric system.
- (8) National Aeronautics and Space Administration.
- (9) National Space Council.
- (10) National Science Foundation.
- (11) National Weather Service.
- (12) Outer space, including exploration and control thereof.

- (13) Science scholarships.
- (14) Scientific research, development, and demonstration, and projects therefor.

Special oversight functions

3(k) The Committee on Science, Space, and Technology shall review and study on a continuing basis laws, programs, and Government activities relating to nonmilitary research and development.