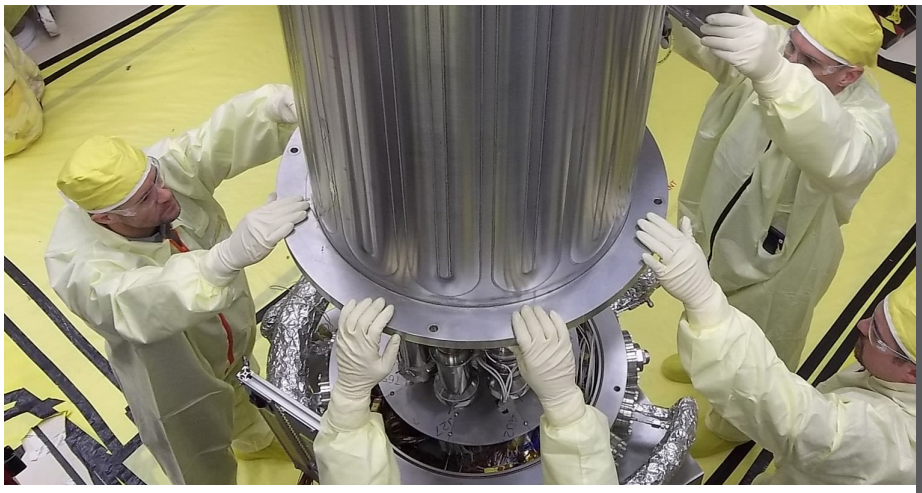
Partnership Opportunities



NASA is partnering with Y-12 and others on a reliable, efficient, kilowatt-size fission power system for future space missions. The prototype system is fueled with highly enriched uranium alloy components produced at Y-12. (Photo courtesy of NASA)

Pantex and Y-12 researchers develop technologies to more effectively deliver the mission — now and in the future.

Partnerships strengthen research and development (R&D) capabilities to drive rapid advancement of technologies beneficial to the Department of Energy (DOE) and the Nuclear Security Enterprise.

DOING BUSINESS WITH US

Expertise

Pantex and Y-12 are hotbeds for the advancement of science and technology. While meeting the country's evolving nuclear security needs, Pantex and Y-12 have acquired a wealth of experience and capabilities in:

- Science-based product evaluation
- Materials science
- Precision manufacturing
- Applied manufacturing technology
- Nuclear nonproliferation
- Data-driven operations management
- Enterprise software solutions
- Energetic materials
- Handling of nuclear materials

Plant Directed Research and Development Program

Pantex and Y-12 fund technical efforts through the Plant Directed Research and Development (PDRD) program, a legislatively enabled program allowing Consolidated Nuclear Security (CNS) to directly invest in the development and application of innovative or high-risk material, manufacturing, and production support technologies that address both unique and broad challenges. PDRD projects improve efficiency in production and business systems and ensure the safety and effectiveness of the nation's nuclear stockpile.

The PDRD program encourages partnering with other sites in the Nuclear Security Enterprise, universities, government agencies, and the private sector. Forming partnerships with universities and industries is key to applied technology development and commercialization efforts. Partnerships lead to better solutions, increased savings, and faster implementation of technologies for both parties.

Partnerships Program

The Partnerships Program strategically aligns CNS mission-directed research with academic, governmental, and industry partners to strengthen R&D capabilities and accelerate technology development. These partnerships ensure innovative technologies and solutions mature and provide maximum value to the partner, CNS, DOE, and the National Nuclear Security Administration.
CNS establishes partnerships with universities, businesses, federal agencies, and national laboratories using the following contractual agreements.

- **Cooperative Research and Development Agreement (CRADA)** — CRADAs allow for collaborative R&D on problems of mutual interest. Under a CRADA, CNS and the partner may share scope responsibilities and cost (in-kind funds) or the partner may pay CNS for CNS expertise and

execution (funds-in). The partner may negotiate exclusive commercial rights (or share in the rights if mutually developed) to license intellectual property covered under the CRADA.

- **Strategic Partnership Project (SPP)** — SPPs allow CNS to conduct paid work for partners, such as solving problems, making prototypes, conducting product evaluations, or developing and implementing solutions.
- **University Partnership** — University partnerships allow university faculty and students to collaborate with CNS researchers, enhancing CNS's ability to solve complex problems.
- **Joint Assignment Agreement (JAA)** — JAAs allow for the formal exchange of personnel, helping both organizations to accomplish long-term technology, business, and research goals.
- **License Agreement** — The commercial rights to CNS-developed technologies may be licensed to private sector partners for sale, use, and/or other benefit to the licensee.
- **Bailment Agreement** — A bailment agreement is a formal technology transfer mechanism that allows for the temporary transfer of government property to support collaborative R&D opportunities.
- **Memorandum of Understanding (MOU)** — An MOU is a nonbinding agreement between CNS and the partner that summarizes areas of mutual interest and potential cooperative efforts.

Contact

If you would like more information, please contact the Office of Technology Commercialization and Partnerships:
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