



TECHNOLOGY TRANSFER

BEST POSSIBLE USE OF NATIONAL ASSETS



Making the best possible use of national scientific and technical capabilities

The U.S. Army Space and Missile Defense Command Technical Center's Office of Research and Technology Applications manages the command's Domestic Technology Transfer Program per Army Regulation 70-57 and 15 U.S. Code 3710. The ORTA acts as a focal point and liaison to government, industry and academia, and works closely with the command's patent counsel for effective protection and transfer of intellectual property. It is a team composed of technical, legal, contractual, small business, and resource management representatives to determine the best solutions for non-traditional partnerships. The ORTA is a part of the Department of Defense technology transfer chain of command. The Technical Center is also a member of the Federal Laboratory Consortium, a network made up of all federal labs within the Department of Defense. The intent for technology transfer is to share research and development by the government with industry, academia and other government agencies by the use of mutually developed agreements.



- **Key Command Assets Available for Use:** Reagan Test Site, Kwajalein Atoll, Marshall Islands; in Alabama the Advanced Measurements Optical Range; Simulation Center; MD Futures Lab; Small Satellite System Integration Lab; Directed Energy System Integration Lab; Air and Missile System Integration Lab; Digital Simulation and Analysis Center; and PNT Resiliency Lab.
- **Key Command Technical Capabilities:** directed energy; hypersonic; space and high altitude; test and evaluation; systems engineering; communications; guidance navigation and control; photonics; radio frequency systems; radars; propulsion modeling and simulation; position, navigation and timing; optics; structures and materials; power and thermal

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TECHNOLOGY TRANSFER CHANGING PARADIGM

Traditionally, technology transfer from the Department of Defense to the non-DOD community was not considered a high priority; it is a way of “giving back” technologies developed in DOD labs to the U.S. taxpayers for commercialization purposes. Now, technology transfer is an integral part of each DOD lab’s mission. While DOD-developed technology was once considered superior to foreign and industrial technology, civilian technology has surpassed it in most critical areas. Originally, technology transfer focused on spin-off transfers to the non-DOD community. Greater attention is now given to spin-on (technology transfers into DOD), dual-use (technology developed for more than one DOD purpose), and side-spin (technology transfer between DOD agencies). Commercial-off-the-shelf use is also encouraged as a part of a new acquisition strategy.

SOME MECHANISMS FOR TECHNOLOGY TRANSFER/ EXPLOITATION

- Cooperative research and development agreements
- Patent license agreements
- Invention license agreements
- Education partnership agreements
- Test service agreements
- Conferences, symposia, exhibits
- Technical assistance and/or assessments
- Personnel exchange
- Technical data exchange
- Partnerships with non-profit agencies
- Presentation of Technical papers or information
- Federal laboratory consortium activities
- Partnership intermediaries

COOPERATIVE RESEARCH & DEVELOPMENT AGREEMENTS

CRADAs provide a means for mutually beneficial partnerships between the government and other entities. Each party brings assets (expertise, hardware, software, facilities, data, etc.), and in the case of the CRADA partner, potential funding, to the agreement to research something that neither could create on its own, usually in a more timely manner than any other traditional approach. CRADAs enhance government/partner trust, as well as provide access to government/military facilities not commercially available, and often result in new, improved, or more cost effective products or processes.

EDUCATION PARTNERSHIP AGREEMENTS

EPAs encourage: (1) beneficial contact between representatives of academia and USASMDC; (2) loaning defense laboratory equipment to the institution; (3) transferring to the institution defense laboratory equipment determined by the commander to be surplus; (4) making laboratory personnel available to teach science courses or to assist in the development of science courses and materials for the institution; (5) involving faculty and students of the institution in defense laboratory projects; (6) cooperating with the institution in developing a program under which students may be given academic credit for work on defense laboratory research projects; and (7) providing academic and career advice and

assistance to students of the institution. Command personnel may participate on a voluntary basis as agreed to by their supervisors.

PATENT/INVENTION LICENSE AGREEMENTS

Command intellectual property (patents and inventions) may be licensed as appropriate through PLAs and ILAs. They can be exclusive (licensed only to that partner and no one else), partially exclusive (licensed only to that partner but the government retains the right to license it to someone else if deemed vital to national security), or non-exclusive (where multiple partners may exist). The Office of Research and Technology Applications can provide a list of available command patents.

STATE AND LOCAL GOVERNMENT ASSISTANCE

The ORTA responsibilities include interaction and assistance with state and local government when possible, which includes academia, K-12 as well as universities and colleges. It may provide and disseminate information on federally owned products, processes and services having potential application to state and local government, as well as private industry. Technical assistance may be provided to state and local government entities, such as advice on ways to improve manufacturing, new technological advances, etc. The ORTA also participates in regional, state and local programs to facilitate or stimulate the transfer of technology to state and local government, and the private sector.

BENEFITS OF TECHNOLOGY TRANSFER

- Assists in meeting command goals
- Creates successful, mutually beneficial and lasting alliances
- Sets up framework for business operations
- Explores new business opportunities
- Employs better ways of doing business
- Allows the government to benefit from unique work jointly performed with non-traditional government suppliers/partners, stimulating competition
- Leverages intellectual property rights
- Utilizes facilities and assets more fully
- Advertises appropriate command capability to the nation
- Develops and enhances workforce knowledge and skills, and “hands-on” experience

For information or for potential partnership activity, contact:
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