



FEDERAL LABORATORY CONSORTIUM
FLC
FOR TECHNOLOGY TRANSFER

*The Only Government-wide
Forum for Technology
Transfer*

**Collaborating with
the Federal
Government on
R&D: A 101-Level
Course**

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FEDERAL TECH TRANSFER POLICY

- Responsible to ensure full use of results of investment in R&D
- Shall strive to transfer federal technology to state and local governments and to the private sector
- Requires each lab and those providing tech transfer support to be responsible for tech transfer consistent with their mission
- Shall ensure improvements to the economic, environmental and social well-being of the U.S. and its citizens



SECNAV INST 5700.16XX (AND OTHER CODE, INSTRUCTIONS)

Laboratories and technical activities may be authorized to:

- Enter into CRADAs, PIAs, among other legal instruments
- License, assign, or waive rights to patents, inventions, trademarks, and copyrights
- Negotiate royalty on licensed IP
- Distribute royalties and other payments



ORTA FUNCTIONS RELATED TO IP

- To assure optimum government protection of inventions made by lab personnel and contractors
- To recognize potential commercial uses of military purpose invention
- To identify potential licensees for lab IP
- To negotiate and write patent licenses
- To ensure that the inventor's interests are protected
- To ensure that maintenance fees are paid for patents
- To publicize inventions at conferences, showcases, conventions, mailings, etc.



GREEN BOOK—FEDERAL TECHNOLOGY TRANSFER LEGISLATION AND POLICY

- Principal statutory and presidential executive order policies that constitute the framework of federal technology transfer program
- Legal reference resource for ORTAs and policy makers
- Helps those outside government understand legal framework within which technology transfer works





WHAT IS A CRADA?

- A Cooperative Research and Development Agreement with one or more non-federal parties to perform cooperative and mutually beneficial research and development
- A CRADA can be executed without triggering legal conditions placed on:
 - Procurement contracts
 - Cooperative agreements
 - Grants



ADVANTAGES OF A CRADA

- Provide personnel, data, services, and property to collaborating parties
- Not required to comply with “competition requirements” (Part 6 of Federal Acquisition Regulations [FARs])
- Title, company name, objectives **publicly available**
- May be used to solve a business-related problem
- Can help commercialize a licensed technology
- Inventor may act as consultant to non-Navy partner



SUCCESSFUL T² USING A CRADA

- Research & development of explosive formulations, shaped charges and detonators
- Schlumberger Technology Corporation conducts oilfield exploration
 - Signed CRADA
 - Gained access to experts
- Collaborated on developing shaped charges
 - New energetic “tool” for successful oilfield exploration
- Navy gets advanced manufacturing production expertise





SUCCESSFUL T2 USING A CRADA

- Autoliv develops air bag systems
- Needs help to develop NONTOXIC composition
- CRADA signed
- Access to experts in gas generants
- Collaborate on air bag system and Navy gas-generating compositions
- Novel nontoxic composition developed
- Navy increases database on potentially useful gas-generating systems
- New technology for passive restraint systems





LICENSING GOVERNMENT-OWNED INVENTIONS

- Each agency of the government is authorized to license patents/patent applications
- License transfers certain rights under a patent or patent application
- License may be “nonexclusive” or “partially exclusive”
- Federal govt. protects inventions with patents, but does **not** copyright any manuals, texts, etc. Navy patents software.





DEVELOPING TECHNOLOGIES FOR LICENSING

- Navy does **NOT** fund efforts to develop a commercial product
 - Vast majority of federal patents are solely for protection
 - Inventions are mission-specific
- Frequently, technologies need minimal modification to develop results, build prototypes, etc., for commercial products



FEDERAL LICENSING PROCESS AFTER APPLICATION TO LICENSE RECEIVED

- Review BP submitted by licensee with application
 - Timeline for product
 - Nature and amount of anticipated investment
 - Capability to fulfill the plan
 - Field of use in which invention will be practiced
 - Anticipated sales several years from product
- Place Notice of Intent to License in *Federal Register* (exclusive and partially exclusive licenses only)
- Provide license boilerplate (varies by agency)
- Negotiate terms of license



FEDERAL LICENSING PROCESS (CONT.)

- Determine non-, partially, or exclusive licensing
 - THREE required fees:
 - Up-front fee due at signing
 - Minimal annual royalty
 - Annual royalty rate
- Licensee and commander of federal lab sign negotiated license
- Government retains right to use the invention for government purposes



FEDERAL SUPPORT FOR LICENSEE

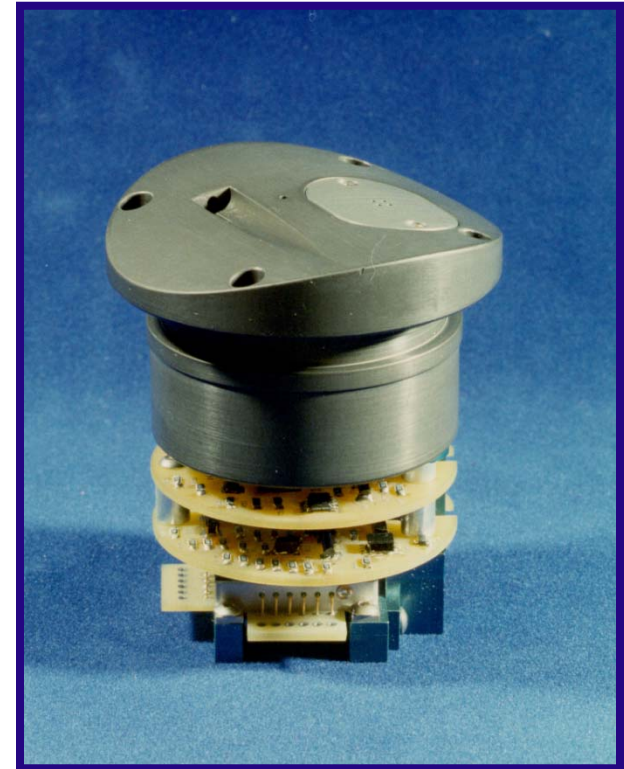
- Licensee enters into CRADA with lab
 - Provides access to inventor for consultation
 - Access to millions of dollars of R&D data and results on technology
 - Access to the federal lab for further development
- If a Maryland company, funding (if required) for CRADA may be provided by Maryland Technology Development Corporation (TEDCO)



SUCCESSFUL T² USING PATENT LICENSE

Differential Pressure Flow Sensor for Marine, Auto and Aeronautical Applications

- Wickford Technologies is entrepreneurial company
- Wickford aware of flow sensor technology through University of Baltimore Lab to Market Program
- Patent license and CRADA negotiated
- CRADA allows Navy inventors to collaborate on development of sensor for the commercial market
- Product on market!





FLC TECHNOLOGY LOCATOR SERVICE

Mission: In cooperation with the federal laboratories, the FLC Technology Locator serves as a clearinghouse for requests from businesses, industrial development organizations, state and local governments, academia, not-for-profit organizations, individuals, and other federal agencies and laboratories.



FLC TECHNOLOGY LOCATOR SERVICE (CONT.)

- Connects all federal labs through e-mail service
- Used by non-federal entities to solve problems, or to find expertise, unique facilities, or technologies
- E-mail sent from non-federal entity to Locator service
- Locator service sends e-mail with contents of need to all members of FLC registered as Laboratory Reps or ORTAs
- Laboratory Rep or ORTA reviews request and replies if the lab can help solve the problem
- Service is free, fast-acting, valuable mechanism for finding solutions to needs



CONSIDER LICENSING A PROVEN TECHNOLOGY

- Leverage a unique national asset of internationally recognized scientists, engineers, and world-class facilities for **COMPETITIVE** advantage
- Numerous technologies available with known commercial value
- Add to an existing business as an additional novel product
- Become an entrepreneur and create a business based on a federal innovation
- Federal inventors, R&D results, and facilities available for commercializing a product under a CRADA
- Available state and local support may be available for your business