

# COOPERATIVE RESEARCH and DEVELOPMENT AGREEMENT (CRADA)

National Small Business Conference

National Defense Industrial Association (NDIA)

Los Angeles Airport Marriott

June 1-2, 2005

***SYMVIONICS***, Inc. 

# Agenda

- CRADA Definition
- Public Law / General Authority
- Specific Legislative Authorities
- Award Considerations
- Partners – Who Can Play ?
- Conceiving the CRADA
- Developing the CRADA Agreement
- SYMVIONICS CRADA Examples

# DEFINITION

Cooperative Research and Development Agreement (CRADA):

A legal agreement between a federal laboratory and a non-federal party to conduct specified research or development efforts that are consistent with the missions of the federal laboratory

# Public Law / General Authority

- Stevenson-Wydler Technology Innovation Act of 1980. Public Law 96-480
- Federal Technology Transfer Act of 1986. Public Law 99-502
- 15 USC Sec. 3710a: General Authority
  - Established Office of Research and Technology Applications (ORTA) in Govt. laboratories
  - Permitted all Federal laboratories to enter into CRADAs with other business entities (OBE)
  - Permitted negotiation of license agreements between Govt. and OBE

# Specific Legislative Authorities

- Laboratory may license, assign or waive its rights to intellectual property
- Laboratory may grant patent license for invention to collaborating OBE
- Laboratory may grant patent license to OBE for invention made prior to CRADA
- Laboratory shall ensure OBE retains title to OBE inventions
- And, most importantly...

# Specific Legislative Authorities (cont.)

- Laboratory may accept, retain and use funds, personnel, services, equipment and property from OBE and provide personnel, services, equipment and property to OBE towards the conduct of R&D efforts consistent with the efforts of the laboratory

# CRADA Award Considerations

- CRADA selection done by the Director of Govt. Laboratory (delegated to ORTA)
- CRADA selection not subject to FAR (because no funds go from Govt. to OBE)
- 'Special consideration' given to small business in CRADA selections
- 'Preference' given to CRADAs which manufacture the product in U.S.
- Typical CRADA term is 3 to 5 years
- Research results exempt from FOIA disclosure for 5 years

# CRADA Partners - Who Can Play?

- Any Govt. owned Federal laboratory, or any GOCO laboratory (if CRADA included in strategic plan or as joint work statement),  
and...
- Other Business Entities (OBE) such as Federal agencies; State/local Govt.; corporation / LLC / partnership; foundations; Non Profit Org; even individual person



# Conceiving the CRADA

- CRADA must benefit BOTH parties
- Theme: Technology Transfer
  - Technology developed with public funds transferred to private sector for commercial use
  - Technology developed by private sector transferred to Govt. for Govt. (military) use
- Define the Goals for each party
  - Advance the research
  - Prototype development
  - Commercialization
  - Product improvement
  - Positive Public Relations

# Conceiving the CRADA (cont.)

- Estimate the “Value” of the Goals to Each Party
- Define Each Party’s Contribution
  - Funds (license agreement)
  - Personnel (scientists, managers, admin asst)
  - Services (network admin, metrology)
  - Equipment (office, lab test, aircraft)
  - Property / facility (runway, control room, building)
  - Other (unlimited, except for Govt. \$)
- Return On Investment (ROI)
  - “Dollarize” the contributions from both sides
  - Are the costs worth the investment ?  $ROI > 1$  ?
- Good to Go !

# Developing the CRADA Agreement

- Formats/Templates
  - Air Force AFI 61-302 Cooperative Research and Development Agreements
  - Standard Navy CRADA 5<sup>th</sup> Edition, rev 1, May 2002
- Typical Sections of Air Force CRADA Agreement
  - CRADA number
  - Preamble
  - Definitions
  - Work Plan
  - Financial Obligations

# Developing the CRADA Agreement

- Typical Sections of Air Force CRADA Agreement (cont.)
  - Patents / Copyrights
  - Proprietary Information
  - Term / Modifications / Disputes
  - Representation and Warranties
  - Liability
  - General Terms and Provisions
  - Notices
  - Approval Signatures
  - Appendix A – Work Plan

# SYMVIONICS CRADA Examples

- Air Force – AF Flight Test Center, EAFB
  - Interactive Analysis and Display System (IADS®)
  - DeltaSym™
- NASA – Ames Research Center
  - Comprehensive Identification from FrEQUENCY Responses (CIFER®)

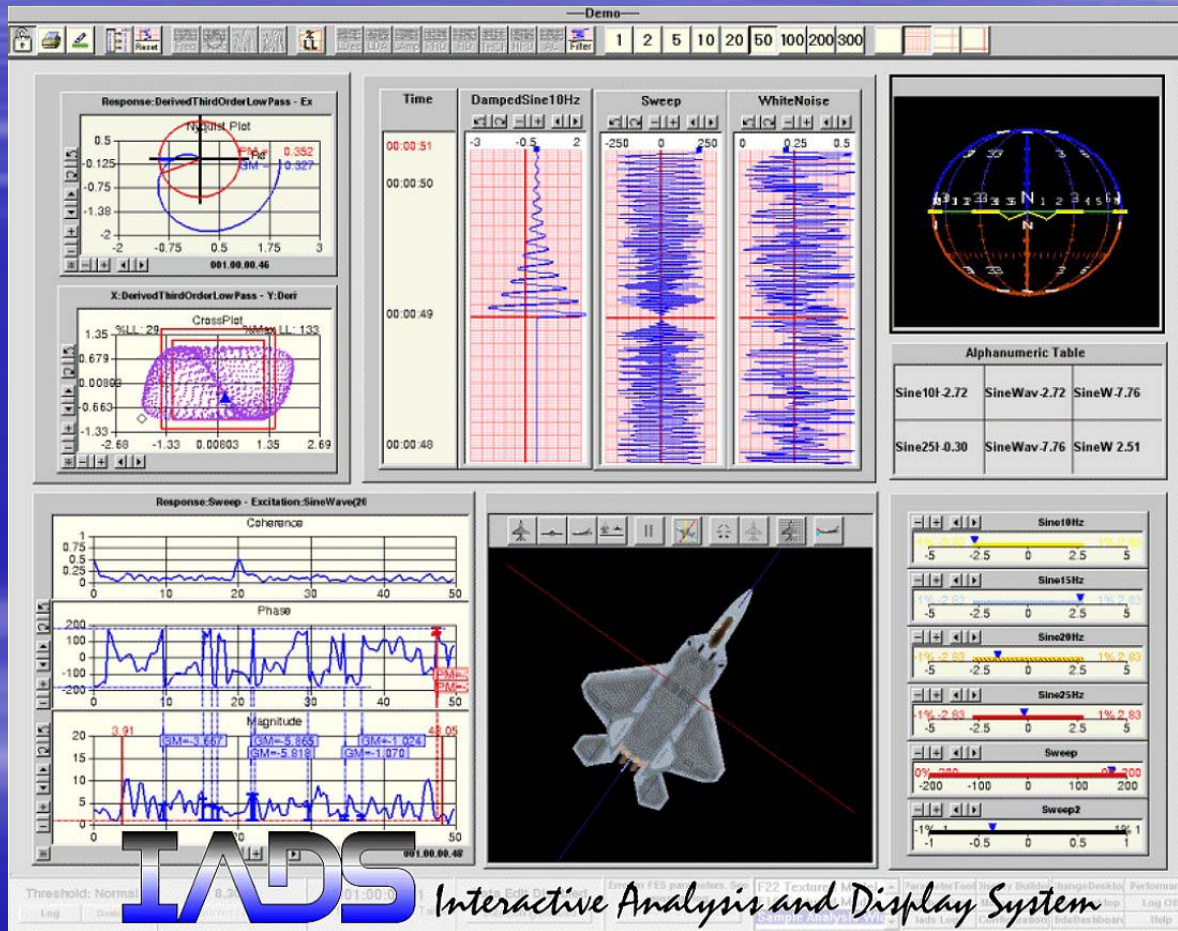
# SYMVIONICS CRADA - IADS®



1-2 June 2005  
UNCLASSIFIED

*SYMVIONICS, Inc.*

# SYMVIONICS CRADA - IADS®



1-2 June 2005  
UNCLASSIFIED

**SYMVIONICS, Inc.**

# SYMVIONICS CRADA - IADS®

- Highlights of CRADA Agreement
  - Allows commercialization of IADS
  - Allows sales of IADS to major defense contractors and commercial aircraft mfgs.
  - Extends IADS use to other Air Force & Navy bases, NASA
  - Provides funds and public relations to AFFTC
  - Provides equipment, facilities and public relations to SYMVIONICS
  - ROI for both parties >> 1



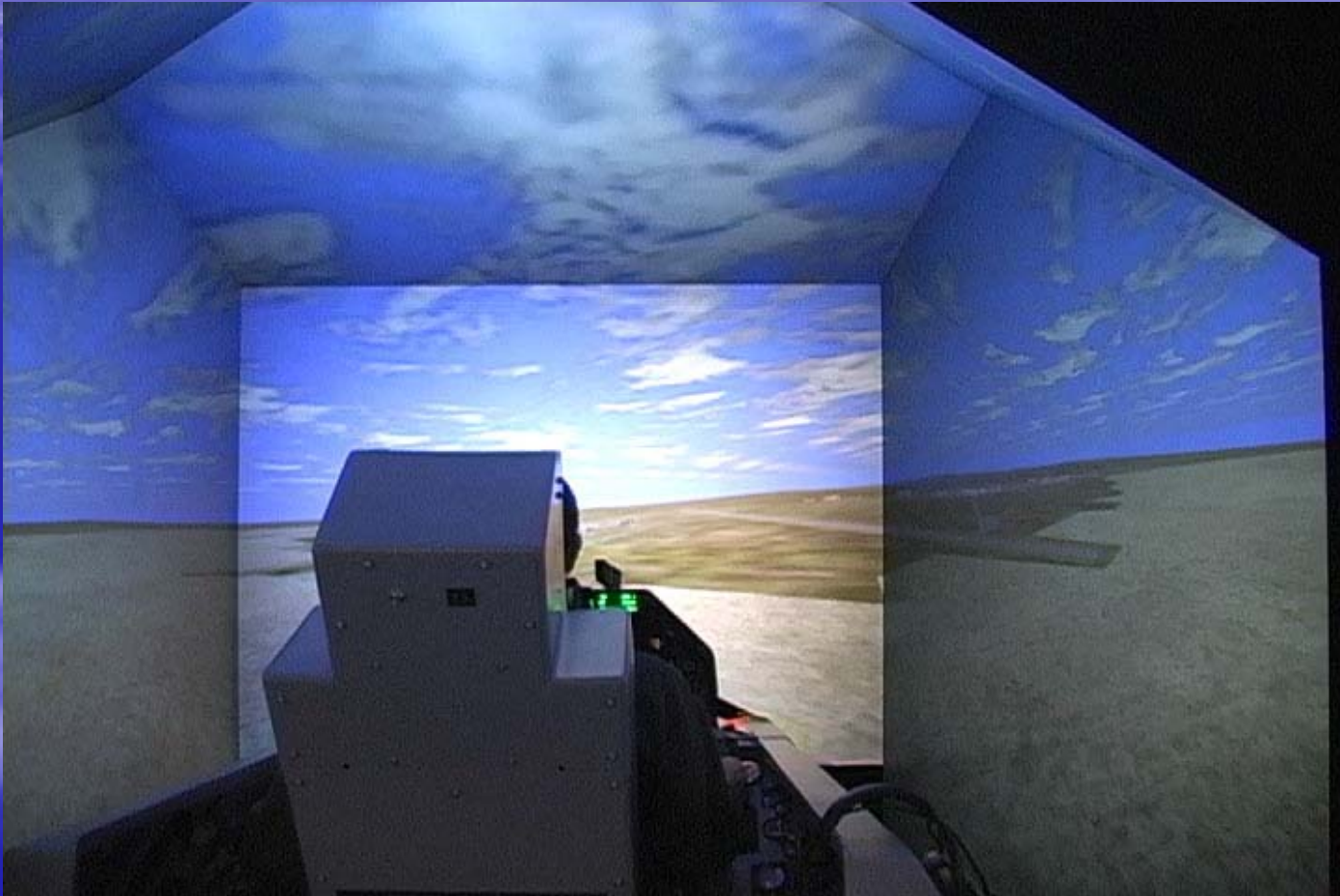
# SYMVIONICS CRADA - DeltaSym™



1-2 June 2005  
UNCLASSIFIED

*SYMVIONICS*, Inc.

# SYMVIONICS CRADA - DeltaSym™



1-2 June 2005  
UNCLASSIFIED

*SYMVIONICS*, Inc.

# SYMVIONICS CRADA - DeltaSym™

- Highlights of CRADA Agreement
  - Allows commercialization of DeltaSym
  - Will provide funds and public relations to AFFTC
  - Will provide equipment, facilities and public relations to SYMVIONICS
  - ROI for both parties = ???