

*The National Center for Manufacturing  
Sciences (NCMS)  
and  
the Commercial Technologies for  
Maintenance Activities (CTMA) Program*

Chuck Ryan

Vice President, Technology



# Who is NCMS?

...not-for-profit technology, information and education consortium providing value-added products and services that enable **collaboration** and learning among manufacturers

# This is NCMS

- Organized under the National Cooperative Research Act of 1984; formed in 1986
- Largest **cross-industry** collaborative R&D consortium in North America
- Devoted to manufacturing technologies, process, and practices
- Nearly two decades of experience in the formation and management of complex multi-partner collaborative R&D programs

# NCMS Track Record

*Nearly two decades of experience in the formation and management of complex multi-partner collaborative R&D programs*

- **Over 50 Cooperative Research & Development Agreements and Memoranda of Understanding**
- **290 multi-participant projects, \$548M in collaboration funds involving over a 1000 participants and 37 Universities, including**
  - **Over 140 DoD projects totaling more than \$348 Million**
- **Four consecutive R&D 100 Awards**
- **Three Defense Manufacturing Excellence Awards**

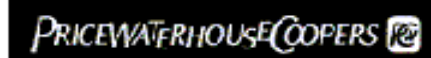
# NCMS Mission

The NCMS mission is to build the global competitiveness and strengthen the US-based manufacturing industry, private and public.

# This is NCMS

- Corporate dues paying members represent virtually every sector of the manufacturing community
- Staffed internally with a diverse array of technical and administrative capabilities
- Headquartered in Ann Arbor, MI with an offices in Washington, D.C. and Bremerton, Washington

Who we are...



LEVERAGING EXCELLENCE

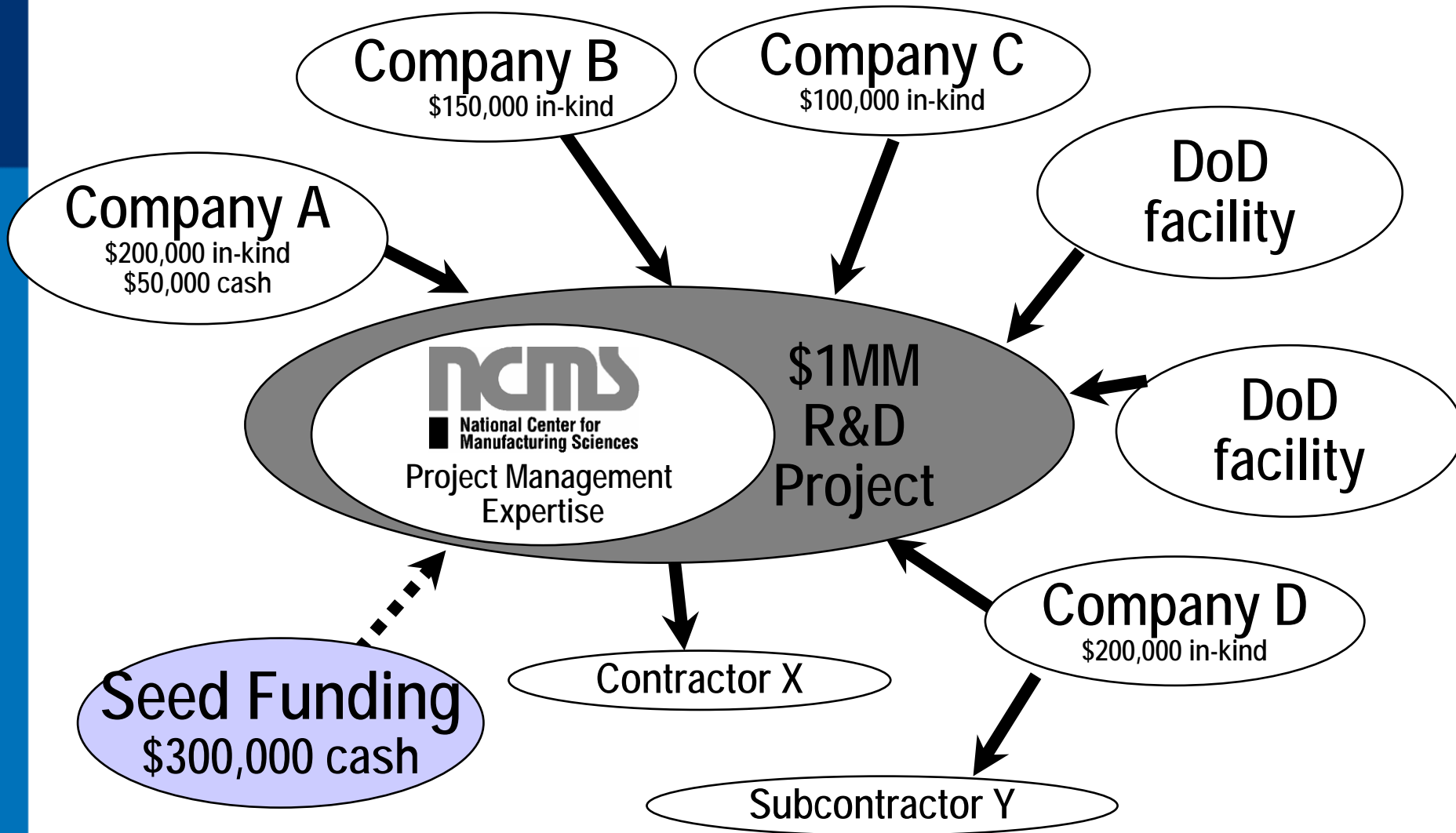
# We Deliver....

- Technology solutions
- Strategic partnerships
- Neutrality
- Program management expertise
- Business practice solutions
- Knowledge capture & e-learning solutions
- Networking opportunities

# Collaborative Programs

- Commercial Technologies for Maintenance Activities (CTMA)
- Advanced Manufacturing Technologies for Hydrogen Energy Systems (AMT-HES)

# A Typical Project- What We Do



# Commercial Technologies for Maintenance Activities (CTMA)

- Identify, form, launch and deploy new projects coupling the needs and strengths of commercial industry with the DoD's maintenance, repair and remanufacturing facilities
- Focus on reducing overall costs and increasing readiness
- Cooperative Agreement between NCMS and the Office of the Secretary of Defense (David Pauling)
- DoD-industry co-funding on a 2:1 match basis
- <http://ctma.ncms.org>

# DoD Participants

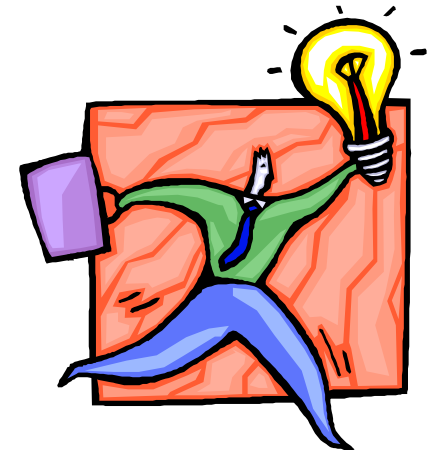
- Tobyhanna Army Depot (AD)
- Corpus Christi AD
- Red River AD
- Anniston AD
- Letterkenny AD
- Fort Richardson AD, Fort Wainwright AD
- Fort Lewis AD
  
- Oklahoma City Air Logistics Center (ALC)
- Ogden (ALC)
- Warner Robins (ALC)
- Elmendorf AFB, Eielson AFB
  
- Marine Corps Maintenance Center Albany
- Marine Corps Maintenance Center Barstow
  
- Naval Air Depot North Island (NADEP)
- NADEP Jacksonville
- NADEP Cherry Point
  
- Norfolk Naval Shipyard (NSY)
- Portsmouth NSY
- Pearl Harbor NSY
- Puget Sound NSY
  
- Naval Submarine Base- Kings Bay
- Naval Submarine Base- Bangor
  
- Naval Undersea Warfare Center, Keyport
- Naval Surface Warfare Center, Crane

# CTMA Project Launch Criteria

- Begins with a one page description
- Project team constructs project concept paper (~7 pages long)
- Joint Industry/DoD interest and needs
  - Hard deliverables, direct impact on manufacturing shop floor
- Cost/Benefits summary sketched out
  - Quantifiable
- Participant roles defined
- Validated Industrial cost-share
- Letter of endorsement from base command
- Submission of concept to Pentagon (Office of Secretary of Defense)
- 10 day turnaround for approval...

# Hurdles for New Project Ideas

- What new technology is being developed and implemented?
  - Not a mechanism for circumventing DoD procurement process.
  - Development and implementation versus research and development
- Is there cross-service involvement?
  - For broader dissemination of technology
- Is there sufficient industrial interest?
  - Greater than 2:1 cost share



# Communications and Networking

- CTMA Website (<http://ctma.ncms.org>)
- The CTMA Connector Newsletter
- Annual Working Symposium
  - 2006: April 3-6, Norfolk/Williamsburg

# 2005 CTMA Working Symposium Notes:

- Tours on Thursday
  - Naval Undersea Warfare Center, Keyport
    - Leave at 8:00 am; return at 1:00 pm
  - Boeing
    - Leave at 8:30 am; return at 12:00 pm
- Meeting attendance forms and survey
- Presentations and attendees list are now available online at  
<http://ctma.ncms.org/symposium2005/presentations.htm>

# Agenda Changes

- Track 4 Wednesday 8:35 - Chris Clendenin withdrawn – Replaced by I-POMX briefing by Dr. Mohsen Rezayat
- Two presentations are out of track – both in track 2
  - 8:10 AM Friction Stir Welding (Jamie Florence) would fit best in Track 1
  - 8:35 AM DoD Joint Services Readiness Support Center (Robert Miller of NAVSEA) would fit best in Track 3

# Symposium Structure and Expected Outcome

- **Tuesday am: Definitions of Needs**
- **Tuesday pm, Wednesday am: Ongoing Efforts and New Ideas**
- **Wednesday pm: Identify New Project Ideas**
- **Networking opportunities: receptions, breaks**
- **FY'05 CTMA Funding: \$12.75 million**
- **Your responsibility: Participate, Represent, and Network**