



Partnering to Accelerate Innovation

An Accelerated Technology Transition Process for Unmanned Systems

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Partnering to Accelerate Innovation

CCAT is:

A national collaboration of universities, industry, and government devoted to the discovery and **rapid transition** of new technologies to solve critical national defense and homeland security problems.



A Public/Private Partnership

- **Office of Naval Research (ONR)**

- Program management
- Overall Navy coordination
- Identification of critical requirements

- **SPAWAR System Center-San Diego**

- Technical program management
- Technical requirements definition
- Technology transition services
- Technology Beta Test support
- Unmanned Systems Branch
- Ocean Tech Branch

- **Connect**

- Venture Capital organizations
- Investment strategy experience
- Angel Organizations
- Mentoring Support

- **SDSU**

- Research Foundation
 - Program management & funds administration
- Entrepreneurial Management Center
 - Market studies & business plans
 - Entrepreneur & business development
 - Angel/venture capital networking

- **UCSD**

- Jacobs School of Engineering
 - Technical expertise
- von Liebig Center
 - Technical consulting
 - Client management support

- **CSUSB**

- Provides added growth focus to Inland Empire
- Performs CCAT processes in sync with San Diego



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CCAT History

- Started Fall 2001
- Total funding received to date - \$32.7M
- Total number of clients – 153
- Overall Success Rate – 51.3%
- Success rate 2007 – 67%



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CCAT Process

- Establish partnership with a government agency and obtain definition of high priority near term needs.
- Open national solicitation to find solutions from either the defense industry or commercial
- Create a roadmap and necessary steps to transition the product and company to readiness for integration into customers applications. This support includes final improvements to the product, business and marketing advice, and beta testing.
- Support the product and company through initial integration and with upgrades afterwards if necessary.



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CCAT Strategy to Support Rapid Transition of Unmanned Systems

- Partnership with SSC-SD Unmanned Systems Branch
- Initial Solicitation late 2006
- Current Solicitation expands on initial effort
- Intend to expand into Ocean Technologies
- All effort tied into Acquisition Strategy



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Performance 2007

- Autonomous Mapping of a room
- Radiation Detection, Location, and Categorization
- Stereo optics for Odometry and 3D Mapping
- Deployment of sensors for continual surveillance
- War fighter Associate to allow robot to autonomously follow soldier, point weapon in same direction, and move to cover when weapon is fired



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Requirements for 2008 Examples

- Detection of trip wires
- Detection of weapons
- Detection of bombs
- Capability to open doors
- Human presence detection
- Non-lethal defense



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Technology Status Requirements

- TRL 6 – 7
- Can be prepared for integration in 5 months (packaging and interface efforts, etc.)
- Basic technology proven



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CCAT Technology Transition Plan - 2008

	J	F	M	A	M	J	J	A	S	O	N	D
Solicitation Open	▲	▼										
Written Evaluation		▲	▼									
Panel Evaluation			▲	▼								
Awards				▲	▼							
Performance						▲	▼					
System Integration									▲	▼		

Solicitation Opens – January 28, 2008

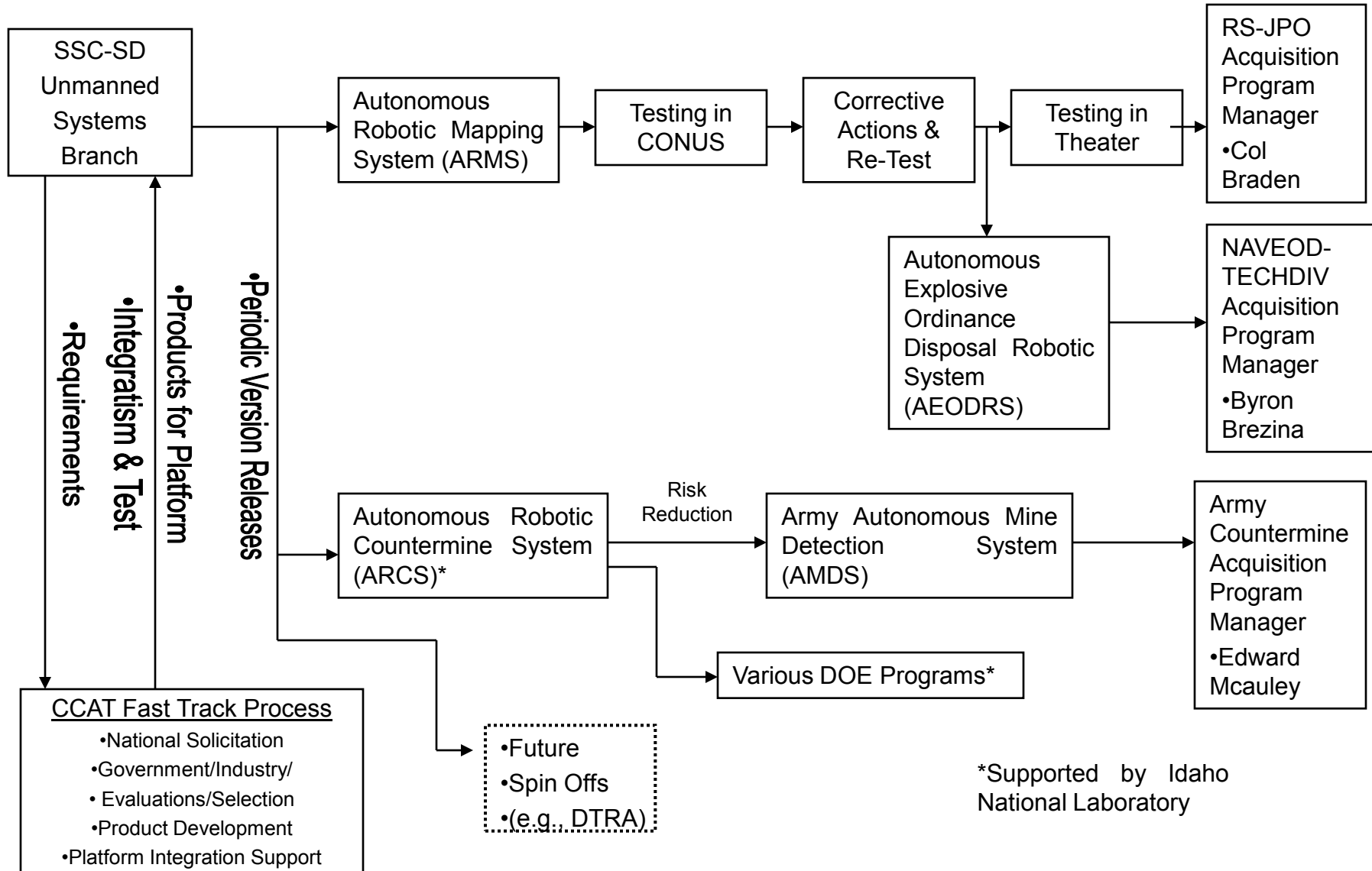
Solicitation Closes – February 27, 2008

Awards – May 2008

Integration Complete – December 2008

CCAT/SSC-SD

Accelerated Tech Transfer Process For Man Portable UGV's





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How to Apply to Solicitation

- All information and application form at www.ccatsocal.org.
- For questions call Tom Sheffer at (619) 594-4135