



Donald J. Leo

DARPA / Defense Sciences Office

also,

Professor

Virginia Tech

Mechanical Engineering Department

Outline



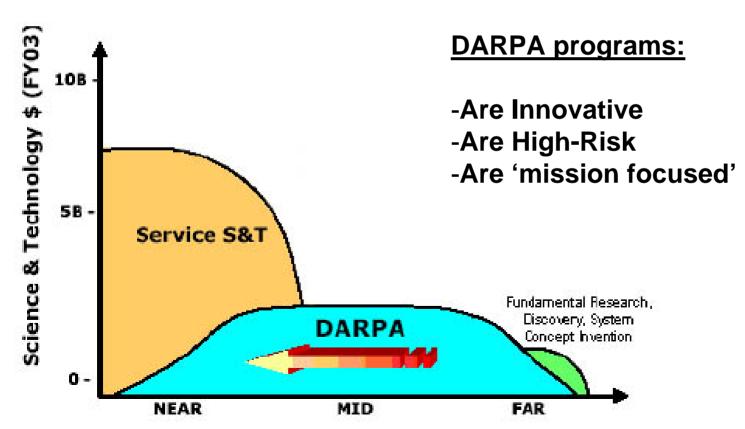
- DARPA Organization
- Doing Business with DARPA
- Some Opinions on DARPA and early career development



DARPA Mission

Mission:

To prevent technological surprise by our adversaries, and to create technological surprise for our enemies.



Distribution Statement "A" (Approved for Public Release, Distribution Unlimited)

DARPA Organization



Director, Tony Tether Deputy Director, Bob Leheny

Information Exploitation Bob Tenney (Acting)

Sensors

Exploitation Systems

Command & Control

Tactical Technology

Stephen Welby Garv Graham

Air/Space/Land Platforms

Unmanned Systems Space Operations

Laser Systems

Future Combat Systems

Planning / Logistics

Special Projects

Joe Guerci **Brian Pierce**

Chem/Bio Def Systems

Counter Underground Facilities

Space

Sensors/Structures

Navigation/Sensors/ Signal Processing

Advanced Technology

Dave Honey **Larry Stotts**

Assured C3ISR

Maritime

Early Entry/Special

Forces

Defense Sciences

Steven Wax **Brett Giroir**

Bio Warfare Defense **Technologies Biology** Materials & Devices **Mathematics**

Information Processing **Technology**

Charlie Holland Barbara Yoon

Cognitive Systems

Computational -Perception

Representation & Reasoning

Learning

Natural Communication

MicrosystemsTechnolo

John Zolper Dean Collins

Electronics

Optoelectronics

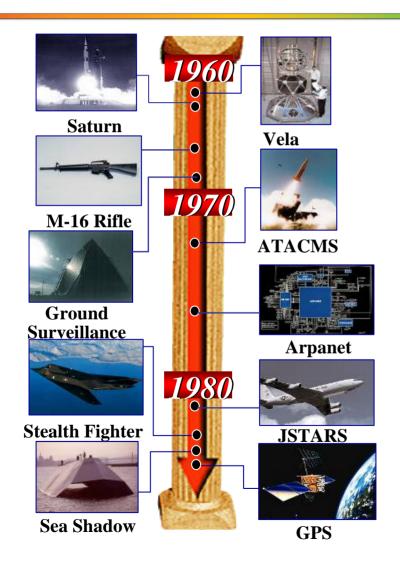
MEMS

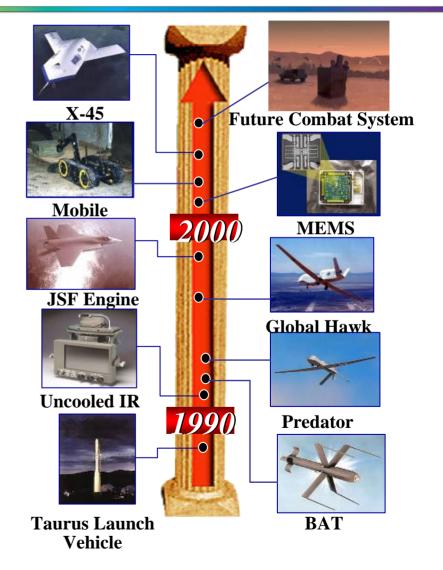
Combined

Microsystems



DARPA Legacy





Doing Business with DARPA



Seed' Efforts

Check the year-long Broad Agency Announcement for each office for areas of interest.

Programs

Generally announced through a separate BAA that describes the particular technical areas of interest.

'Typical' Seed Effort



DARPA will sometimes fund short-term (6-12 month) efforts that focus on overcoming **one or two key technical challenges** associated with high-risk, high-payoff technologies.

Funding levels vary greatly, but are often in the range of 100K-500K for 6-12 months.

'Typical' DARPA Program



Phase I (12-18 months) to demonstrate the ability to overcome key technical challenges. Generally a team of performers. Phase I milestones lead to a downselect of performers.

Phase II (24-36 months) to demonstrate the potential of transitioning the technology to a relevant application. Teams may change from the Phase I to Phase II transition to increase odds of successful technology transition.

Doing Business with DARPA



The good news:

DARPA is willing to except a reasonable amount of technical risk if the potential payoff is high...

A creative solution based on sound physical principles is equal to, or more important, than previous data.

The bad news:

DARPA program managers will require **regular updates** on the progress of your effort.

DARPA programs require quantitative milestones to demonstrate progress.

Continued funding if often based on meeting program milestones.