



DARPA Tech '99

Welcome and Overview

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In The Future, Institutions Must *Simultaneously* Pursue:

- Systematic, continuing improvement
- Building tomorrow's systems based on a proven today
- Radical innovation with a goal that makes obsolete and, to a large extent, replaces even the most successful current products



The Innovation Process

More than invention -- a change in operations

Two different kinds

- Sustaining, evolutionary innovation
- Disruptive, revolutionary innovation



DARPA Mission

*Radical Innovation in Support
of National Security*

- National-Level Problems
- Operational Dominance
- High Risk Technology Development,
Exploitation -- *Avoid Surprise*



Strategy

- Flexibility to find, exploit externally generated ideas is paramount
- High technical risk, high-focus investments
- Competition



Approach

- Broader horizon than commercial analogues
- More focused than university research
- Not bound by military requirements
- Investment-oriented focus
- Flat, small organization
- Rotate programs, staff



DARPA Priorities

- Attract best people
- Maintain fair, competitive environment
- Develop methodical process to discover, exploit disruptive technologies
- Use experimentation as vehicle to enable collaboration between warfighter and technologist



National Security

- Protection from Biological Attack
- Protection from Information
Attack



Operational Dominance

- Outcome-Based Preparation, Planning
- Affordable, Precision Moving Target Kill
- Mobile, Distributed Communications
- Future Warfare Concepts



High-Risk Technology Exploitation

- Core Technologies
- The Intersection of Biology,
Information and Microsystems

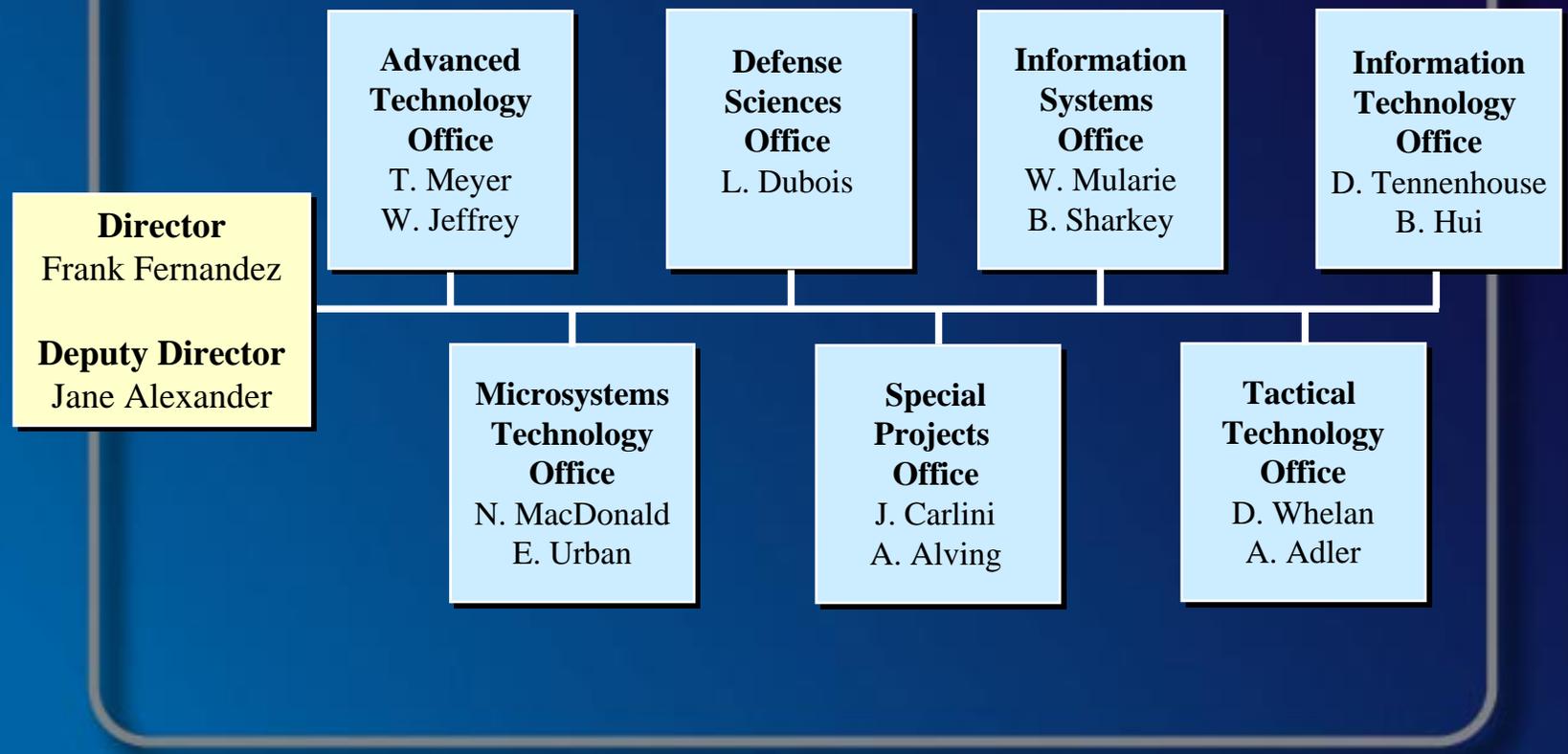


Reorganization

- Flatten organization . . .
emphasize bottoms-up,
opportunity-driven nature
- Emphasize thrust areas



Office Structure





*Consider Joining the
DARPA Program
Management Team*