



NAVAL SEA SYSTEMS COMMAND

Engineering & Education

Outreach Efforts

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Statement A: Approved for public release; distribution is unlimited.

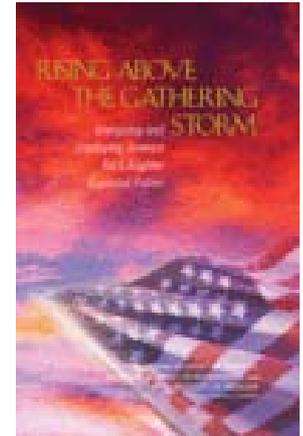
Winning Innovation Competition Requires DoD to Participate Fully in National Strategy

Recommendations from “Rising Above the Gathering Storm” and its sequel:

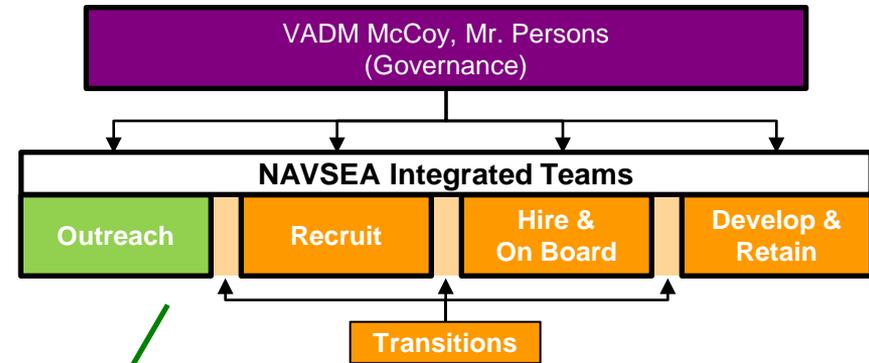
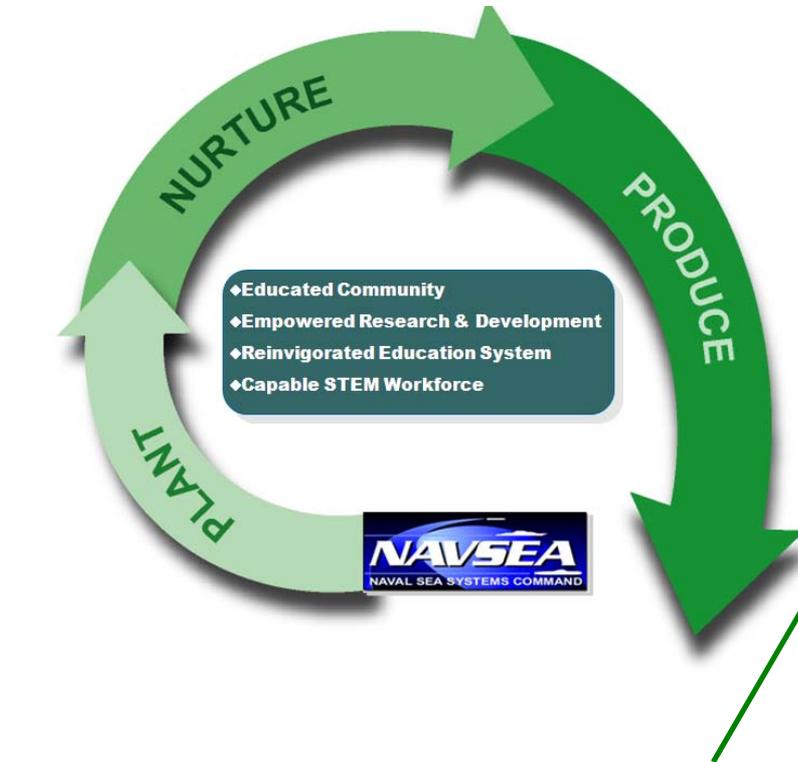
- 1) Increase America's talent pool by vastly improving K-12 mathematics and science education***
- 2) Sustain and strengthen the nation's commitment to long-term basic research***
- 3) Develop, recruit, and retain top students, scientists, and engineers from both the U.S. and abroad***
- 4) Ensure that the United States is the premier place in the world for innovation.***

Sources: *Rising Above The Gathering Storm, Energizing and Employing America for a Brighter Economic Future*, 2005. and *Rising Above the Gathering Storm, Revisited: Rapidly Approaching Category 5*, 2010.

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Enterprise Talent Management (Outreach Framework)



- 1) *“Plant” the seeds of interest in K-12 through S&E involvement in STEM education and extracurricular activities.*
- 2) *“Nurture” that interest through Scholarship and Mentoring at the Under and Postgraduate levels.*
- 3) *“Produce” the STEM workforce with targeted R&D investment, to capture faculty and student interest in Naval technologies and NAVSEA careers.*
- 4) *Seek and utilize all authorities and funding opportunities to maximize the Engineering & Education Outreach impact.*

An Integrated Approach Across the Talent Spectrum



OUTREACH FRAMEWORK

(An Arsenal of Integrated Activities)

Outreach Elements

Element #1 – PLANT
K-12 Outreach

Element #2 – NURTURE
Student Employment/Sponsorship

Element #3 – PRODUCE
Partnerships for
Capability Enhancement

National
(Echelon 1,2)

National Defense Education Program (NDEP)
Science, Technology Education Program (STEP) ...

NAVSEA Scholarships,
Student Employment
SMART

Naval Engineering Education Center (NEEC)

Multi-Site
(Echelon 3,4)

SeaPerch
First Robotics
Mission Ocean Patriots Program

Cooperative Education Agreements
With Tuskegee,
Polytechnic University of Puerto Rico, ...

Research Agreements with
VA Tech,
New Mexico State,
NCA&T, ...

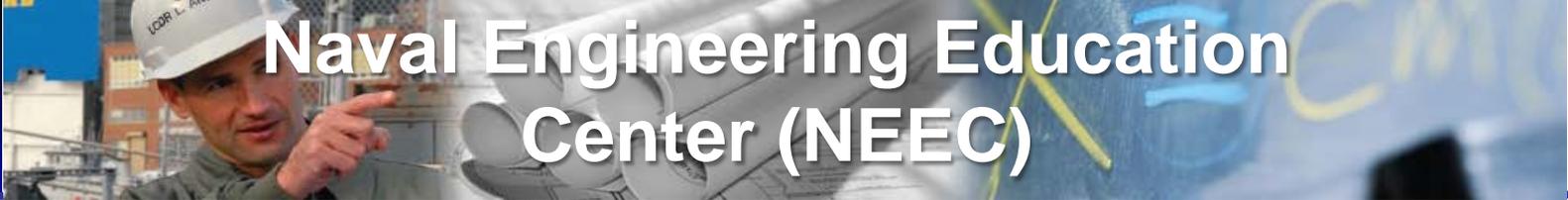
Local
(Echelon 4,5)

State Programs
(e.g. Going Places)
Science Fairs
Summer Camps

Cooperative Education Agreements with
Local Colleges & Universities

Educational Partnership Agreements (EPAs)
with
Colleges & Universities
e.g. UPR Mayaguez

NAVSEA EXAMPLE ACTIVITIES



Naval Engineering Education Center (NEEC)

- 15 Universities led by the University of Michigan
- 2 Engineering Professional Societies
 - American Society of Naval Engineers
 - Society of Naval Architects & Marine Engineers

Key Partners With the NEEC



“Why NAVSEA is Involved?”

- **Majority of Workforce within 5 Years of Retirement Eligibility**
- **Technical Skills Absolutely Critical to Support the Fleet**
- **Vital to Increase Pool of US Scientists & Engineers To Meet Navy Needs**

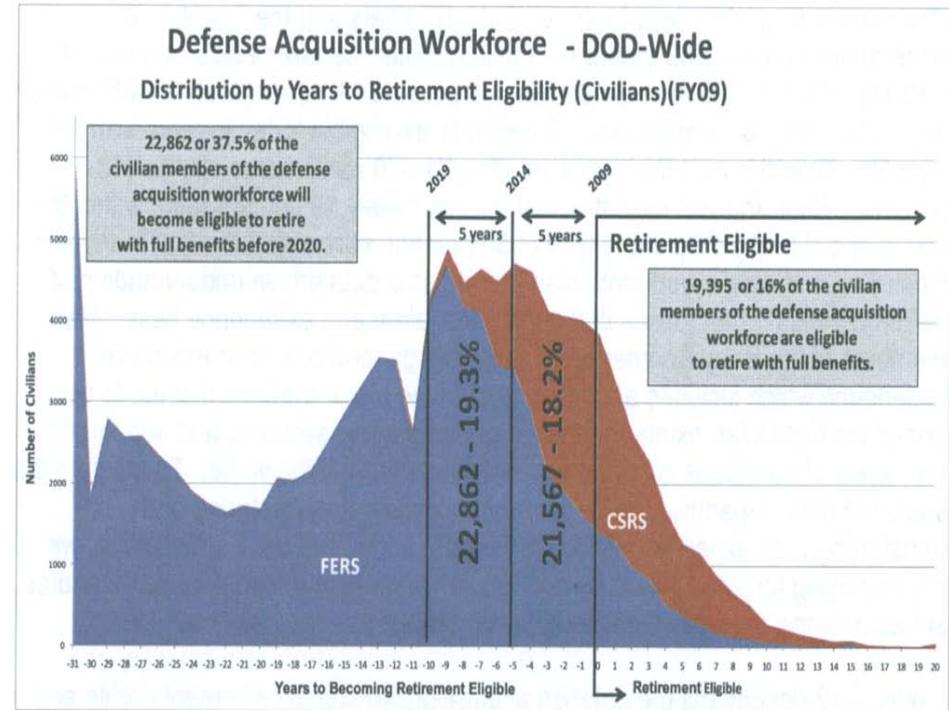


Figure 2-13. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (Civilians)²⁵