



# **BREAKOUT SESSION**

# Best Practices in Attracting, Retaining and Training People

20 December 2004

Best Practices in Attracting, Retaining and Training People Breakout Session Workshop on National Security Workforce Challenges and Solutions

Slide 1





 A discussion of recruiting, retention and training best practices and how these can be shared on a regular basis going forward by focusing on how industry and federal agencies can collaborate in building a stronger pool of workers across the Aerospace and Defense Workforce





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- Moise DeVillier
- Betty Duffield
- Nora Galyon
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- Cynthia Miller-Wentt
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- 1. What are the main challenges in attracting and retaining technically skilled workers with associate degrees or their equivalent in national security fields?
- 2. What are the key challenges in getting students on a track to pursue careers in science and engineering? (e.g. foundational skills, lack of awareness)
- 3. When can future employers and professional societies make most difference? (e.g. middle school, high school, undergraduate)
- 4. How quickly are skill requirements changing and how are these being met? What are the shared features of the most effective training programs and strategies? What data are available that shed light on the causes of attrition in technical training programs?
- 5. What are the most important steps that government agencies and companies take, individually and jointly, to expand the technical talent pool from which they draw and to retain entry-level employees with technical skills?
- 6. Do you know what drives the turnover rate among young professionals within your organization between years 7 and 8 of young professionals?
- 7. On the four-level evolution of valuing diversity, what level are we as industry and how can we reach the top -- inclusiveness?
- 8. What can industry and government do, individually and jointly, to insure adequate supply of technically skilled American workers?





- The current system for providing qualified employees to the science and technology community does not keep up with the requirements of the industry. This includes barriers such as:
  - Lack of true partnering between government, industry and academia
  - Not leveraging successful efforts
  - Not identifying non-traditional talent pools
  - Our current education system
  - Our current hiring practices
  - Our current leadership people management practices





- Identification of critical skills, sustaining educational programs
- Clearances
  - Inform students and families prudently
  - Retention of employees with security clearances
  - Burnout of clearance employees
  - Competing for clearance talent
- Obtaining an inclusive workforce
- Students don't understand the possibilities and opportunities of sciences & engineering
- Phased retirement issues (gov't & industry)
- Lack of mentors and role models
- Microwave Society immediate vs waiting
- Employability competencies , skills, continuous learning





RECOMMENDED ACTION	RECOMMENDED ACTION ORGANIZATION	RECOMMENDED RESULT		
<ul> <li>Create a shared vision – a culture of technically skilled individuals.</li> <li>1. Market</li> <li>2. Pool resources</li> <li>3. Branding</li> <li>4. National vision for USA (Apollo)</li> </ul>	Association action – membership of each association has to agree it is important enough to fund	Shared vision within the National Security Workforce and broader understanding of the NSW by the general public		
Improved Marketing and Communication System for Scientist and Engineers across Industry, Academia and Gov't for National Security	OPM- Improved Website, Best Practice Sharing Working Group, Applicant Tracking System One centralized location for all retiring military and gov't employees and students to submit resumes. DoL and POM partner with Industry to develop one stop shop	Better Applicant Experience, Survey, More Applicants Hired, Improved turnaround time from resume submittal to contact and success metrics established of 30 days from open to accept. A bigger pool of cleared talent with critical skills.		





RECOMMENDED ACTION	RECOMMENDED ACTION ORGANIZATION	RECOMMENDED RESULT
Better awareness and training of folks using the current compensation systems to attract, retain and motivate performance	ΟΡΜ	More equity across the industry for pay
Identify and market to non-traditional talent pools and target groups like young people, parents and mid-career individuals to go into the Aerospace and Defense Industry.	AIA and NDIA	Increased percentage of employees in aerospace and defense careers





RECOMMENDED ACTION	RECOMMENDED ACTION ORGANIZATION	RECOMMENDED RESULT
Gather retention best practices	AIA – security industry association groups	Best practices understood & adopted by individual organizations





RECOMMENDED ACTION	RECOMMENDED ACTION ORGANIZATION	RECOMMENDED RESULT
Identification and implementation of universal skills & competency requirements (technical & leadership skills)	Existing SCANS (DoL) DOD-NDIA-AIA- NASA-FAA- DHS-NSF-NSA- DOC-DOE	Baseline certification across national security workforce
Implement or enhance professional development programs that support multiple career paths across national security workforce. Including: Degreed S&E's, technicians, apprentices, machinists	Same as above	Clear & ongoing dual career pathways & professional development programs across national security workforce





Question #1:

What are the main challenges in attracting and retaining technically skilled workers with associate degrees or their equivalent in national security fields?

- Pay is lower for associate degree level work and the jobs are typically in higher cost of living areas
- Lack of outreach and advertising for associate degree programs. Outreach usually occurs at the local level
- Less mobile group. Relocation packages have to be very broad to be attractive to this group
- Lack of attention for continuing education. Need to provide incentives for continuing education for this group
- Provide challenging work assignments broaden scope
- Clearance issues





**Question #2:** 

What are the key challenges in getting students on a track to pursue careers in science and engineering? (e.g. foundational skills, lack of awareness)

- Cost of education particularly for tier 1 schools
- Image problem with the field of engineering, sciences
- Lack of awareness as to what engineers do
- Lack of extracurricular science based activities
  - Need a program to recruit math and science students for life long skill development
- Many children are not neurologically prepared for school (kindergarten, 1<sup>st</sup> grade)
- Females & minorities do not express interest in becoming engineers (or the sciences) – therefore limits ability to promote/develop
- Teachers need to experience business & industry through internships in government & businesses
- Lack of engagement of communities and parents
- Children don't view going to school as 'their job'





## Question #3: When can future employers and professional societies make most difference? (e.g. middle school, high school, undergraduate)

All of the above. Start in elementary school





**Question #4:** 

- How quickly are skill requirements changing and how are these being met? What are the shared features of the most effective training programs and strategies? What data are available that shed light on the causes of attrition in technical training programs?
- Continuous, rapid technological changes require new technical skill sets and forces agencies and industry to confront growing workforce shortfalls in hiring and training
- Effective strategies: rotations within organizations, simulated training, early exposure, integrated work team and project management teams
- Data: numerous government and agency sources





#### **Question #5:**

What are the most important steps that government agencies and companies take, individually and jointly, to expand the technical talent pool from which they draw and to retain entry-level employees with technical skills?

- Provide incentives
- Relax qualification requirements
- Recruit nationally
- Foster positive working relationships
- Create career paths
- Training
- Special authorities from Congress





**Question #6:** 

Do you know what drives the turnover rate among young professionals within your organization between years 7 and 8 of young professionals?

- Limited dual career path
- Lack of challenging work
- Layoffs/Base closures
- Completion of military/educational commitments





#### Question #7:

On the four-level evolution of valuing diversity, what level are we as industry

and how can we reach the top -- inclusiveness?

### Four levels of diversity:

1.Affirmative Action

2.Equal Opportunity/Representation

3. Diversity

4.Inclusiveness

- Create a diverse pool of employees
- Mentoring
- Training / Education
- Create opportunities
- Generational thought patterns start at home
- Exposure throughout the community





**Question #8:** 

What can industry and government do, individually and jointly, to insure adequate supply of technically skilled American workers?

- Provide information on choices made early in life and subsequent consequences
- Mentoring tie into broader community, schools, parents
- Professional standards industry perceptions, branding image
- Professional Associations SWE, WII, NSBE
- Tracking results of Programs industry, gov, academia
- Demographics/geography

"It is important, you can make a difference"