

INTERVENTIONS: 2006 ACTIVE DEMOS

In December 2006, OPM published “A Status Report on Personnel Demonstration Projects in the Federal Government”. That report provided an update on the status of active personnel demonstration projects in the Federal Government; Commerce, AcqDemo and DoD S&T Labs Demonstration projects. This document highlights the interventions introduced in each demo. These tested interventions have shown through evaluation that they are effective human resources management tools. In addition, we believe that some interventions, such as performance focused pay and categorical ranking, can have an impact on organizational effectiveness.

Commerce Demo

Interventions and Objectives

	<u>Interventions</u>	<u>Objectives</u>					
		Increased quality of new hires; improved fit between position requirements and individual qualifications; greater likelihood of getting a highly qualified candidate.					
		Increased retention of good performers.					
		Improved individual and organizational performance.					
		More effective human resources management.					
		More efficient human resources management.					
		Support for EEO/Diversity in recruiting, rewarding, paying, and retaining minorities; providing opportunities for a diverse workforce; and in maximizing contributions of all employees.					
1	Career paths	X			X		
2	Pay bands (Broadbanding), in conjunction with flexible entry salaries	X	X		X		X
3	Performance-based pay increases (pay for performance)		X	X			X
4	Supervisory performance pay		X	X			X
5	More flexible pay increase upon promotion		X				X
6	Performance bonuses		X	X			X
7	Direct examination	X		X			X
8	Agency-based staffing	X		X			X
9	More flexible paid advertising	X		X			X
10	Local authority for recruitment						

	payments	X		X			X
11	Local authority for retention payments		X	X			X
12	Automated broadband classification system					X	
13	Delegated classification authority to managers				X		
14	Delegated pay authority to managers				X		
15	Three-year probationary period for scientists and engineers (ZP employees performing R&D)	X					

Interventions Implemented under the Commerce Demonstration Project

The interventions implemented in the Demonstration Group focus on classification, pay, recruitment, retention, and an expanded probationary period. The fifteen interventions, listed below, are described in the following sections. {Year Seven Report, p. 2-13 to 2-22}

Four career paths have been established that group occupations according to similar career patterns.

Under the Demonstration Project, Demonstration Group occupations have been grouped into four broad career paths. Each career path consists of occupations that have similar career patterns and therefore can be treated similarly for classification, pay, and other personnel purposes. In contrast, under the GS system, occupations are grouped by similarities in content. The career paths developed for the Demonstration Group are:

- **Scientific and Engineering (ZP).** Consisting of professional technical positions in the physical, engineering, biological, mathematical, computer, and social science occupations; and student trainee positions in these fields.
- **Scientific and Engineering Technician (ZT).** Consisting of positions that support scientific and engineering activities through the use of skills in electrical, mechanical, physical science, biological, mathematical, and computer fields; and student trainee positions in these fields.
- **Administrative (ZA).** Consisting of positions in such fields as finance, procurement, human resources, program and management analysis, public information, and librarianship; and student trainee positions in these fields.
- **Support (ZS).** Consisting of positions that provide administrative support, through the use of clerical, typing, secretarial, assistant, and other similar skills; and student trainee positions in these fields.

The career paths are intended to make classification simpler, more understandable, and provide increased flexibility to support organizational changes.

Pay bands are composed of one or more GS grades and allow flexibility in the pay setting. The change from the GS system to pay bands (broadbanding) is one of the major Demonstration Project interventions. The pay bands were created by collapsing the traditional GS salary grades (including locality rates) into five broad groups with much broader ranges (i.e., pay bands).

The table below shows the four career paths, their corresponding pay bands, and GS system equivalents. The maximum rate of a pay band is equivalent to step 10 of the highest GS grade used to create that band. Each career path collapses GS grades into bands differently; therefore, the band ranges differ by career path. Only the ZP and ZA career paths have pay bands that correspond to the full spectrum of GS grades. One to six GS grades are consolidated into any given pay band, depending on the career path and level of the band.

Career Paths and Bands for Demonstration Group Participants¹

CAREER PATHS	BANDS														
Scientific and Engineering (ZP)	I					II					III		IV		V
Scientific and Engineering Technician (ZT)	I			II				III		IV		V			
Administrative (ZA)	I					II					III		IV		V
Support (ZS)	I	II		III		IV		V							
GS Grades	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

¹ Federal Register Notice: Personnel Management Demonstration Project, U.S. Department of Commerce (December 24, 1997).

Pay bands are intended to add flexibility in pay setting for attracting job candidates and rewarding high performing employees. Pay bands were also put in place to provide larger, more flexible classification ranges, aiding in the delegation of classification and pay authority to line managers. Pay bands are also meant to facilitate the provision of performance incentives for employees, in that they give employees the opportunity to receive raises more quickly based on their performance.

Together, career paths and pay bands are intended to simplify classification and accelerate pay progression, as well as facilitate pay for performance.

Pay for performance is a system meant to link pay increases directly to performance, resulting in a more competitively paid, higher quality workforce.

Another major intervention is the establishment of a pay for performance system. Pay for performance links pay raises directly to job performance. Under the Demonstration Project, three components were subsumed by pay for performance. The first component is the annual comparability increase (ACI), an adjustment to basic pay that is based on the annual general increase and locality pay approved by Congress and the President each year. The second component is an annual performance-based pay increase. Bonuses constitute the third component. Funds that were applied to within-grade increases, quality step increases, and promotions (from one grade to another when those grades are in the same band) are now being applied to performance-based pay increases. In contrast to the GS system, Demonstration Group participants are eligible for pay increases each year since there is no waiting period under the Demonstration Project.

Pay for performance is meant to govern employee progression through the pay bands. Pay for performance is, of course, meant to tie pay raises to performance, in contrast to the GS system, which ties pay raises mostly to tenure. Its goal is to give higher pay raises to those whose performance is high. Because of the flexibility that the bands allow, the performance-based pay raises can, in theory, be substantial. The pay for performance system, along with the pay bands, is meant to improve performance and retain high quality employees.

At the onset, DoC created an automated Performance Payout System (PPS) to manage the performance data, annual payout/ACI process, and pay table updates. This was later upgraded from a DOS-based to a web-based system. As of Year Five, there have been many improvements to the PPS. Site historians report that DoC staff, along with contractors, has been making significant strides in improving the software and reports.

Implementation of the pay for performance system also included the implementation of a new performance appraisal system. It is important to note that NOAA units outside of the Demonstration Group have also adopted a new performance appraisal system, independent of the Demonstration Project. The following table outlines some of the major differences between the traditional, the new NOAA, and the Demonstration Project performance appraisal systems.

Performance Appraisal Systems

TRADITIONAL SYSTEM (Comparison Group)	NEW NOAA SYSTEM (Comparison Group)	DEMO PROJECT SYSTEM (Demonstration Group)
<ul style="list-style-type: none"> • Individual performance plans 	<ul style="list-style-type: none"> • Individual performance plans 	<ul style="list-style-type: none"> • Individual performance plans
<ul style="list-style-type: none"> • Performance improvement plans 	<ul style="list-style-type: none"> • Performance improvement plans 	<ul style="list-style-type: none"> • Performance improvement plans
<ul style="list-style-type: none"> • 500-point system 	<ul style="list-style-type: none"> • Two-tier system 	<ul style="list-style-type: none"> • 100-point, two-tier system
<ul style="list-style-type: none"> • Critical and non-critical elements included 	<ul style="list-style-type: none"> • Critical elements included; non-critical elements not included 	<ul style="list-style-type: none"> • Critical elements included; non-critical elements not included

Each employee in the Demonstration Project has an individual performance plan that is composed of several critical performance elements. Under this performance appraisal system, all of the performance elements are critical; if an employee gets an unsatisfactory rating on one element, there is no performance score. These employees must be put on a performance improvement plan and given a chance to improve before a final rating is put on record. Employees deemed unsatisfactory are not eligible for pay for performance increases, bonuses, or annual adjustments to basic pay. Demonstration Group participants who are not performing unsatisfactorily on any of the performance elements are evaluated using the 100-point scoring system. Supervisors provide recommended scores to the Pay Pool Manager who arrays the data in score order to maintain the linkage between scores and pay actions.

In Year Three, an additional factor that may have impacted pay, but is not directly linked to performance, was a governmentwide special pay rate for information technology (IT) employees that has remained in effect ever since. Demonstration Project Site Historians reported that this action took effect on January 1, 2001 and applied to all IT professionals equivalent to GS 12 and below. In addition to increasing the pay of IT workers in the Demonstration Project, this event may have favorably impacted the recruitment and retention of IT workers in the Demonstration Project, and elsewhere in the government.

Supervisory performance pay is meant to help retain supervisors by giving them higher pay potential for high supervisory performance.

Supervisors in all career paths are eligible for supervisory performance pay when their salaries reach the maximum for their pay band. In each pay band that includes supervisory positions, there is a corresponding supervisory band (as shown below). The supervisory bands have the same minimum levels as do the non-supervisory bands. The only difference is that the supervisory bands extend up to 6 percent above the maximum point of the corresponding non-supervisory band. The amount that a supervisor is paid above the maximum rate of his/her pay band constitutes supervisory performance pay. The range constituting supervisory performance pay (up to 6 percent above the maximum) can be reached only through pay for performance increases gained through the regular performance appraisal process. Supervisory performance pay is meant to give the ability to raise the pay of high performing supervisors to more competitive levels, thus improving retention.

Pay Bands for Supervisory Employees

CAREER PATHS	BANDS															
Scientific and Engineering (ZP)	I					II					III		IV		V	
Scientific and Engineering Technician (ZT)	I				II				III			IV		V		
Administrative (ZA)	I						II					III		IV		V
Support (ZS)	I		II		III		IV		V							
GS Grades	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	

Flexible pay increases upon promotion are intended to allow supervisors to tie pay to employee performance and to substantially reward excellent performance.

One intervention related to pay bands (broadbanding) and pay for performance is flexible pay increases upon promotion. High performing employees now have the potential to receive substantial pay increases when they are promoted. Because of the less restrictive nature of pay bands, an employee’s salary, upon promotion, can be set anywhere within a band (and with a minimum increase of six percent) without being restricted by the small steps characteristic of the GS system. This intervention is meant to encourage the retention of high performers by making their salaries more competitive with the private sector.

Performance bonuses are payments meant to reward and encourage employee performance and improve retention.

Performance bonuses are cash awards given following a performance appraisal cycle, in conjunction with performance pay decisions. Pay Pool Managers can award a bonus to any employee with an “eligible” performance rating (i.e., individuals who have a performance score of 40 or above). Pay Pool Managers make decisions based on supervisor recommendations and the amount in the bonus pool. The maximum bonus amount that can be given is \$10,000 (greater amounts can be granted with the Departmental Personnel Management Board’s approval). Bonuses are meant to reward high performers, increasing their retention. Bonuses are also meant to act as a performance incentive to the workforce.

Performance bonuses can also be awarded to DoC employees who entered the Demonstration Project too late to receive a performance rating, but who have received a DoC performance rating of record of at least “satisfactory” within the previous 13 months. In these situations, bonuses can be used to remove the disincentive of not receiving a pay increase. Performance bonuses can also be used as a tool to reward high performing employees who are pay capped.

Flexible paid advertising allows DoC to use more specialized advertising sources to attract highly qualified candidates.

Flexible paid advertising is an intervention that allows DoC to utilize paid advertising sources as a first step in recruiting, without having to utilize unpaid sources first. Hiring officials can now use a wider scope of advertising sources, as well as concentrate on more specialized sources. More flexible paid advertising is meant to allow hiring officials to make greater use of alternative recruitment sources.

Local authority for retention payments allows DoC to grant payments for the purpose of retaining high quality candidates.

Similar to local authority for recruitment payments, local authority for retention payments allows operating units to grant retention payments not to exceed the greater of \$10,000 or 25 percent of base pay. Retention payments can only be made to employees who are retiring or going to private industry (at the time this evaluation occurred). These payments also are based on market factors. All scientific, engineering, and hard-to-fill positions are eligible. The main purpose for the retention payments is to increase the quality of the workforce by retaining high quality performers who are retiring or are leaving for a position in private industry.

FEPCA also allows retention payments up to 25 percent of an employee’s base pay. Similar to the recruitment payment intervention, while the current Demonstration Project modeled this intervention after the NIST Demonstration Project, retention payments are also available elsewhere in the federal government.

The classification system was automated to make the classification process easier to use and more efficient.

Under the Demonstration Project, the classification system has been automated. Position descriptions can be created, accessed, classified, and altered electronically. A DOS-based software program was originally built for these purposes. In Year Three, efforts were underway to transition to a web-based system that is expected to be a major improvement by making the process far more user-friendly. In Year Seven, the ACS was fully web-based and was accessible to all supervisors. Specifically, supervisors can use the system to:

- Create a new position description
- Create a new position description based on another

- Delete a position description
- Edit an unofficial position description
- Print a position description
- Review a position description
- Run queries
- Delete, edit, print, or view a position description by action number
- Export a position description
- Maintain the position description system.

The purpose of the automation is to make the classification system easier to use and more expedient. Automation of the system is also meant to minimize the resources needed for operation and to minimize the classification decisions that need to be made.

Delegated classification authority places classification responsibility with the managers.

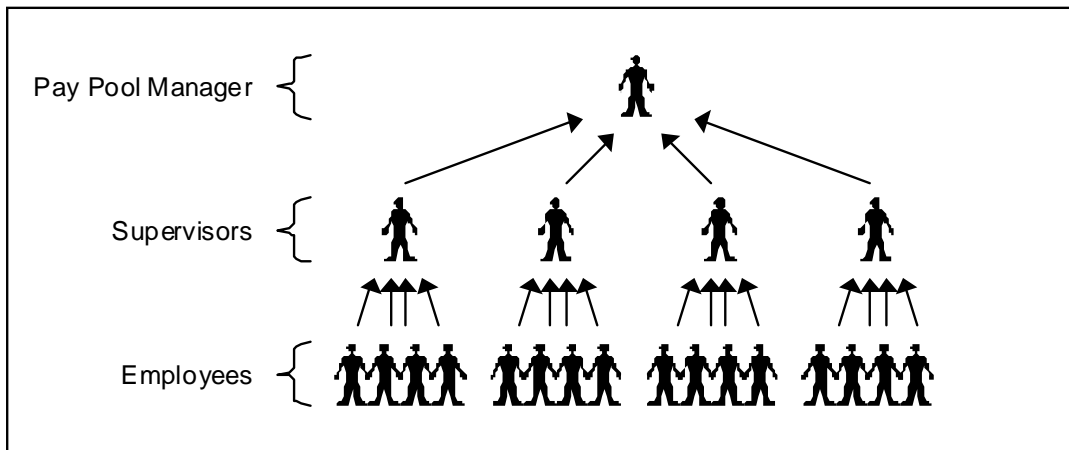
Delegated classification authority gives line managers the authority to classify positions. Each operating unit's Operating Personnel Management Board has the responsibility for overseeing the delegation of classification authority. Human resources staff has the responsibility to monitor and review classification decisions. Delegated classification authority is meant to give managers more control over classifying the work they supervise. Managers must understand their operating unit's mission and the work they supervise to be effective classifiers.

Delegated pay authority allows line managers to direct and administer pay functions.

Delegated pay authority gives line managers the authority to direct and administer pay procedures. Under the GS system, federal employees receive increases in salary in accordance with their grade and step. Under the Demonstration Project, supervisors evaluate the performance of their subordinates and communicate their recommendations to the Pay Pool Manager. Supervisors may also make recommendations for performance-based pay increases and/or bonuses. The Pay Pool Manager, however, makes the final decisions regarding the performance scores and dollar amounts for both performance-based pay increases and bonuses.

The purpose of delegated pay authority is to improve the effectiveness of human resources management by having line managers more involved as managers of the human resources in their units. Managers have a first hand view of employee performance and therefore can make the most effective pay recommendations. Line managers' involvement is increased significantly under the Demonstration Project because they now have responsibility and authority for managing pay and making pay decisions. The figure below displays the delegated pay authority relationship within the Demonstration Group. These newly delegated authorities are subject to oversight by the Operating Personnel Management Boards at the local level, and by the Departmental Personnel Management Board, which ensures adherence to Departmental policy and procedures.

Pay Authority Relationship



The three-year probationary period gives managers more of an opportunity to observe ZP employees performing R&D duties for the full R&D cycle.

Under the three-year probationary period intervention, employees in the scientific and engineering (ZP) career path who perform research and development (R&D) work are subject to a three-year probationary period.² Managers have the authority to end the three-year probationary period of an R&D subordinate at any time after a year. Near the end of the first year of probation, a manager decides whether to 1) change the employee to non-probationary status, 2) remove the employee, or 3) keep the employee on probationary status. If the employee remains on probationary status, then the manager must choose between these three options near the end of the second year. If the employee remains on probation into the third year, then the manager must make a final decision on whether to remove or keep the employee.

² Other employees in the Demonstration Project serve the same one-year probationary period as employees throughout the government.

AcqDemo

Interventions and Expected Outcomes Identified in the 1999 Federal Register Notice

	<u>Intervention</u>	<u>Degree Implemented</u>	Increased quality of the acquisition workforce and the products it acquires	Increased timeliness of key personnel processes	Higher retention rates of excellent contributors and separation rates of poor contributors	Increased satisfaction of serviced DoD customers with the acquisition process and its products	Increased workforce satisfaction with the personnel management system
1	Simplified, accelerated hiring	Somewhat ¹	x				x
2	Contribution-based Compensation and Appraisal System (CCAS)	Fully	x		x		x
3	Academic degree and certificate training	Somewhat	x				x
4	Extended probationary period	None	x				x
5	Sabbatical	Limited	x		x		x
6	Voluntary emeritus programs	Limited	x				x
7	Appointment authority	Somewhat		x		x	x
8	Simplified classification system	Fully		x			x
9	Broadbanding	Fully		x	x	x	x
10	Simplified modified RIF	Limited			x	x	x
11	Expanded candidate selection process						x
	Notes	1. Air Force most systematically and forcefully managed this intervention					

The following list of interventions places them in the order of the expected outcome to which they contribute – see AcqDemo Interim Evaluation Report p. I-7 to I-22. Note there is no description of the “Expanded Candidate Selection Process” intervention.

1. Degree of Implementation: Hiring flexibilities were implemented at some level across all participating components. The Air Force, with nearly 2,000 AcqDemo participants, most systematically and forcefully managed this intervention.
2. Contribution-based Compensation and Appraisal System: CCAS measures employee contribution to the mission and goals of the organization, rather than job performance as defined by a job description and performance standards. The purpose of CCAS is to provide an equitable and flexible method for appraising and compensating the acquisition, technical and logistics (AT&L) workforce and to motivate employees to improve their contributions (thereby improving the overall quality of the workforce). Contribution is measured by using a set of factors, discriminators, and descriptors, each of which is relevant to the success of a DoD acquisition organization. Each

factor has multiple levels of increasing contribution and contains descriptors for each respective level within the relevant career path. Annual Objectives are jointly developed by the employee and supervisor.

These Objectives are tied directly to the mission of the organization. Employees are assessed on accomplishment of these objectives and their contributions in each of the six factors. An overall contribution score (OCS) is derived and is used by a panel of managers and a pay pool manager to determine pay increases and contribution awards. Under CCAS, the annual general pay increase is not automatic, and the funds for this increase as well as those for step increases and awards are distributed among all participants according to their contribution. More detailed descriptions of CCAS, as well as the results of four annual payouts, are included in Volume II—Technical Report.

Degree of Implementation: CCAS was fully implemented across all participating components, and received the majority of the time and resources devoted to AcqDemo implementation.

3. Academic degree and certificate training: The Defense Acquisition Workforce Improvement Act (DAWIA) authorized degree and certificate training for DAWIA coded positions through the year 2001. AcqDemo extended this authority for the duration of the project to all employees in acquisition support positions identified in the project. This should help improve the quality of the workforce through increased training opportunities. Funding for academic degree and certificate training, while potentially available from numerous sources, is the responsibility of the participating organization.

Degree of Implementation: This intervention was implemented by all components, but with relatively limited intensity, due primarily to funding constraints.

4. Extended probationary period: This provision applies only to the Business Management and Technical Management Professional career path (NH). Often new hires in this career path are required to attend extensive training and educational assignments away from their normal work site and outside the review of their supervisors. An extension of the probationary period can be equal to the length of any educational/training assignment that places the employee outside normal supervisory review. This should improve workforce quality by ensuring that only those judged fully capable—through longer probation—are brought into the workforce.

Degree of Implementation: This intervention has not been implemented by any participating organization to date.

5. Sabbaticals: Sabbaticals are designed to help employees participate in study or work experience that benefits the organization and acquisition community and contributes

to their development and effectiveness. The sabbatical provides opportunities to acquire knowledge and expertise that employees could not get in the standard work environment. As a program requirement, a sabbatical must result in a product, service, report, or study that will benefit the acquisition community as well as increase the employee's individual effectiveness. Approval by the activity's Executive Director or equivalent is required.

Degree of Implementation: This intervention was implemented on a limited basis, with only seven instances of use during from 1999 through 2002, again due primarily to resource constraints (based on managers and supervisors focus groups).

6. Voluntary emeritus program: This program allows AcqDemo organizations to accept the gratuitous services of retired or separated employees. It will be beneficial to workforce quality during personnel reductions as skilled acquisition professionals accept retirement and return to provide corporate knowledge and mentoring to less experienced employees. Voluntary emeritus assignments are not considered federal employment, and therefore do not affect an employee's entitlement to buy-outs, severance pay, or retirement payments based on earlier separation from federal service. This program may not be used to replace civilian employees occupying regular positions required to perform the mission of the command.

Degree of Implementation: This intervention was implemented on a limited basis, with only six instances of use from 1999 through 2002.

7. Appointment Authority: Under AcqDemo, there are three appointment options: permanent, temporary-limited, and modified term. The permanent and temporary-limited are the existing title 5 authorities. The new, modified term appointment authority provides the ability to expand and contract the workforce and adapt to variable workloads and mission changes. Under the modified term option, appointments may be made for a period that is expected to last longer than one year, but not to exceed five years, with an option for one additional year when the need for an employee's service is not permanent. After two years under this appointment, an employee may be converted to permanent status through internal merit promotion procedures without further competition.

Degree of Implementation: This intervention was implemented on a relatively limited basis, with approximately 40 modified term appointments being made each year.

8. Simplified Classification System: Under AcqDemo, commanders (or equivalent) may re-delegate classification authority to subordinate management levels, at least one level above the first-line supervisor (except commander's direct reports). Contribution-based Compensation and Appraisal System descriptors are used for broadband level determination, instead of OPM standards. A new, simple Position

Requirements Document (PRD) replaces the normal position description form. The PRD combines position information, staffing requirements, and contribution expectations into a single document. It includes job specific information and reference to the CCAS level descriptors.

Degree of Implementation: This intervention was implemented by all components, with widespread use of the delegation of classification authority.

9. Broadbanding: The broadbanding system replaces the GS grade structure. Acquisition occupations with similar characteristics are grouped together into three career paths with broadband levels designed to facilitate pay progression and internal assignment of duties, and to allow for more competitive recruitment of quality candidates at differing pay rates. The three career paths are Business Management and Technical Management Professional (NH); Technical Management Support (NJ); and Administrative Support (NK). There are four broadband levels covering GS grades 1 through 15.

Degree of Implementation: This intervention was fully implemented by all components, and is an integral part of the CCAS system.

10. In addition, a simplified, modified RIF process was established, under which employees in AcqDemo within a given Component and located in the same commuting area are placed in a different competitive area from employees not covered by AcqDemo. Employees are entitled to additional years of retention service credit based on appraisal results.

Degree of Implementation: The simplified modified RIF process has been implemented only by the Air Force, for a small unit at Edwards AFB.

S&T Lab Demos

Interventions and Objectives

	<u>Intervention</u>	Improve lab effectiveness through a more flexible, responsive personnel system <i>Chapter 2</i>	Increase line management authority over HR mgmt – delegate compensation & classification decisions <i>Chapter 3</i>	Recruit, develop, motivate and retain a high quality workforce <i>Chapters 4 & 5</i>	Adjust workforce levels to meet strategic program and organizational needs. <i>Chapter 6</i>
1	Broadband Pay Systems (p. 26)			X	
2	Simplified Job Classification (p. 22)			X	
3	Pay for Performance including contribution-based pay (p. 42)			X	
4	Recruitment and Staffing Changes (p. 56.) <ul style="list-style-type: none"> ▪ Lab-based Examining ▪ Categorical Rating ▪ Modified Term Appointments ▪ Extended Probationary Period ▪ Distinguished Scholastic Achievement Appointments ▪ Voluntary Emeritus Corps ▪ Direct Hire Authority for non-citizens 			X	
5	Training (p. 68) <ul style="list-style-type: none"> ▪ Enhanced Training ▪ Critical Skills Training ▪ Sabbaticals 			X	
6	Modified Reduction in Force (p. 71)				X
7	Delegated Authority (p. 19) <ul style="list-style-type: none"> ▪ Compensation ▪ Classification 		X		

Broadbanding

All the laboratories implemented broadbanding systems similar to the one initiated in the project popularly known as the “China Lake Demonstration Project” in 1980.³

³The Navy’s demonstration project in “China Lake” (Naval Air Warfare Center Weapons Division, formerly Naval Weapons Center) and San Diego (Space and Naval Warfare Systems Center, formerly Naval Ocean Systems Center), California, was initiated in 1980 and became permanent in 1994.

Broadbanding reduces the standard fifteen General Schedule grades into a series of three to five bands for a given career path or occupational group. Broadbanding increases organizational flexibility by reducing paperwork for classification actions and promotions. By creating broad pay ranges, it increases pay potential, gives recruiters greater flexibility in offering starting salaries, and, when combined with a pay-for-performance system, provides the opportunity to progress based on performance rather than tenure. As one employee in the focus groups expressed it, “the old system was a clock.”

Within a particular demonstration project, career paths generally correspond to occupational groups with similar educational requirements and pay potential. With the exception of the Air Force Research Lab, which limited its project to scientists and engineers, all the laboratories created similar career paths for their projects (e.g., scientists and engineers, administrative support, technicians, and clerical support), with separate banding schemes for each career path. The salary ranges (corresponding to General Schedule grades) that comprise bands for a given career path also vary across the demonstration projects.

Banding Schemes

Both AFRL and NAVSEA (NSWC and NUWC) have selected a single demonstration plan each for their participating divisions. The Army laboratories have developed and implemented four different plans to date, each designed to meet the needs of a particular laboratory. ARL and AMRDEC banded the high graded scientists and engineers (GS-14 and GS-15) together. MRMC combined GS-13 and GS-14. The ERDC combined GS-12, GS-13, and GS-14. Both MRMC and ERDC left GS-15 in a separate band. AFRL kept both high grades, GS-14 and GS-15, as separate bands, in effect choosing not to band its high grades. However, AFRL allows movement between the bands, i.e., performance-based promotions. In all cases, banding differed from one career path to another. For a graphic description of the various banding schemes, see Tables 4.2 through 4.5.

Army: All Army demonstration projects include a unique feature in Pay Band V (VI for ERDC). Pay Band V covers the pay from 120% of Step 1, GS-15 through SES Level 4 and covers Senior Scientific Technical Managers (SSTM). This band differs from the non-supervisory ST positions, which are classified in the Senior Level Band (formerly grades 16 to 18; Level V for “China Lake”). The rationale behind the formation of this new pay band is that neither the SES nor the ST classification is appropriate for preeminent bench scientists with supervisory responsibilities. The SES classification criteria involve executive responsibility, while ST positions are reserved for non-supervisory bench scientists and engineers. The new Pay Band V resolves this problem by establishing a category that recognizes both the high-level technical and supervisory requirements of such positions.

A grand total of 40 Pay Band V positions have been authorized within DoD. These positions are allocated by the Assistant Secretary of Defense (Force Management Policy) and administered by each military service. The Department of the Army made a rigorous

review of positions that potentially met Pay Band V criteria; the review included a panel process conducted by the Chief Scientist of the Army. Based on the results of that review, in November 1999, the Army requested 16 slots to support Pay Band V positions in Army demonstrations. In December 1999, DoD approved the Army's request.

NAVSEA: The NAVSEA demonstration also includes ST and other Senior Level positions as Band VI of the scientist and engineer career path. However, these positions are covered for employee development, performance appraisal, and awards only. Their classification, compensation, and staffing remain unchanged.

Band VI of the scientist and engineer path includes the Senior Scientific Technical Manager (SSTM) positions under the NAVSEA demonstration project. Of the total 40 authorized within DoD, NAVSEA Warfare Centers have been allocated eight. Additionally, the NAVSEA demonstration project also includes ST and other Senior Level positions. However, these positions are covered only for employee development, performance appraisal, and the incentive pay components. Their classification, basic compensation, and staffing remain unchanged.

The NAVSEA bands overlap to a greater extent than is indicated in the tables. Each band extends downward by one additional grade into the band below. For example, Band IV for scientists and engineers (GS-12/13) actually covers some whose pay is equivalent to GS-11.

NRL: Like army, NRL has been given authority to create a limited number of Senior Scientific Technical Managers, which NRL calls Advanced Research Scientists and Engineers. NRL has been allocated 12 of the 40 DoD-wide positions. These employees are assigned to Band V.

Air Force: The Air Force bands are similar to the concept of a career band. The level designators are anchors, but employees are able to move non-competitively from band to band on the basis of their contribution scores. As in the other labs, budget considerations limit the number of promotions to high grades. However, the original high-grade constraints in existence at the time of the implementation of the demonstration program have been lifted.

Table 4.2 Banding Schemes for Scientists and Engineers

Grade	China Lake	NAVSEA	NRL	ARL	AMRDEC	ERDC	MRMC	AFRL
1	A	I	I	I	I	I	I	
2								
3								
4								
5	I	II	II	II	II	II	II	I
6								
7								
8	II	III	III	III	III	III	III	II
9								
10	III	IV	III	III	III	IV	III	II
11								
12	IV	V	IV	IV	IV	V	IV	IV
13								
14								
15	V*	VI**	V**	V**	V**	VI**	V**	
Above 15*								

China Lake: Navy demonstration since 1980; **NAVSEA:** NSWC (Naval Surface Warfare Centers) & NUWC (Naval Undersea Warfare Centers); **NRL:** Naval Research Laboratory; **ARL:** Army Research Laboratory; **AMRDEC:** Aviation Missile Research, Development, and Engineering Center; **ERDC:** Engineer Research and Development Center; **MRMC:** Medical Research & Materiel Command; **AFRL:** Air Force Research Laboratory.

*These levels cover the Senior Level band.

**This level covers the Senior Scientific Technical Managers (SSTMs).

Table 4.3 Banding Schemes for Administrative Occupations							
Grade	“China Lake”	NAVSEA	NRL	ARL	AMRDE C	ERDC	MRMC
1	A	I	I	I	I	I	I
2							
3							
4							
5	I	II	II	II	II	II	II
6							
7							
8							
9	II	III	II	II	II	II	II
10							
11	III	IV	III	III	III	III	III
12							
13		V	IV	IV	IV	IV	IV
14			V				
15		VI	V	IV	IV	IV	IV

China Lake: Navy demonstration since 1980; **NAVSEA:** NSWC (Naval Surface Warfare Centers) & NUWC (Naval Undersea Warfare Centers); **NRL:** Naval Research Laboratory; **ARL:** Army Research Laboratory; **AMRDEC:** Aviation Missile Research, Development, and Engineering Center; **ERDC:** Engineer Research and Development Center; **MRMC:** Medical Research & Materiel Command.

Note: Air Force does not include administrative employees under the demonstration.

Table 4.4 Banding Schemes for Technical Occupations

Grade	“China Lake”**	NAVSEA	NRL	ARL	AMRDE C	ERDC	MRMC
1	A	I	I	I	I	I	I
2							
3							
4							
5	I	II	II	I	II	II	II
6							
7							
8							
9	II	III	III	II	III	III	III
10							
11							
12	III	IV	IV	III	IV	IV	IV
13							
14							
15	VI	V	V**	III	IV	IV	IV
14							
15					V		

China Lake: Navy demonstration since 1980; **NAVSEA:** NSWC (Naval Surface Warfare Centers) & NUWC (Naval Undersea Warfare Centers); **NRL:** Naval Research Laboratory; **ARL:** Army Research Laboratory; **AMRDEC:** Aviation Missile Research, Development, and Engineering Center; **ERDC:** Engineer Research and Development Center; **MRMC:** Medical Research & Materiel Command.

* These bands apply to Naval Command, Control and Ocean Surveillance Center; Naval Air Warfare Center Weapons Division bands are 1-4, 5-7, 8-10, and 11-12.

** Temporary career level to accommodate current incumbents.

Note: Air Force does not include technicians under the demonstration.

Table 4.5 Banding Schemes for Support Occupations							
Grade	“China Lake”*	NAVSEA	NRL	ARL	AMRDE C	ERDC	MRMC
1	A	I	I	I	I	I	I
2							
3							
4	I	II	II	II	II	II	II
5							
6	II	III	III	III	III	III	II
7							
8	III	IV	III	III	IV	IV	III
9							
10	IV	V					
11							
12							

China Lake: Navy demonstration since 1980; **NAVSEA:** NSWC (Naval Surface Warfare Centers) & NUWC (Naval Undersea Warfare Centers); **NRL:** Naval Research Laboratory; **ARL:** Army Research Laboratory; **AMRDEC:** Aviation Missile Research, Development, and Engineering Center; **ERDC:** Engineer Research and Development Center; **MRMC:** Medical Research & Materiel Command.

* These bands apply to Naval Command, Control and Ocean Surveillance Center; Naval Air Warfare Center Weapons Division bands are GS 1-3, 4-5, 5-6, 6-7, 8-9, and 10-11.

Note: Air Force does not include support occupations under the demonstration.

Dual Career Ladder

Under the broadbanding system, it was expected that mission critical employees (e.g. bench scientists) could advance in pay without becoming supervisors.

Senior Scientific/Technical Manager Positions

An innovative feature of the demonstration is the provision of 40 DoD-wide Senior Scientific Technical Manager (SSTM) positions for highly qualified bench scientists with supervisory responsibility. These positions are allocated by the Assistant Secretary of Defense (Force Management Policy) and administered by each military service. The rationale behind these new positions is that neither the SES (executive positions) nor the ST (non-supervisory bench scientists and engineers) classification is appropriate for

preeminent bench scientists with supervisory responsibilities. SSTMs are placed in Band V at ARL, AMRDEC, MRMC, and NRL, and Band VI at NSWC, NUWC, and ERDC. Table F-17 (Appendix F) shows the number of SSTMs at each of these laboratories. To date, 36 of the 40 positions have been allocated to Army, NRL, and NAVSEA.

Supervisory Bands

One potentially negative consequence of the dual career ladder concept is pay inversion. First-line supervisors who are in the same band as their subordinates may in some cases receive lower pay than those they supervise. The supervisory allowances, differentials and bonuses offered by some laboratories should help alleviate this problem by compensating them for their supervisory duties. The Army laboratories may compensate supervisors for their added responsibility with higher base pay (AMRDEC and optionally at ERDC) and supervisory bonuses (MRMC). Tables F-18 and F-19 (Appendix F) compare the average pay of supervisors and non-supervisors in the professional and administrative career paths, for AMRDEC, ERDC, MRMC and the other laboratories.

Bonuses

Under most of the laboratory demonstration pay-for-performance systems, employees can receive bonuses in addition to or in lieu of base pay increases. Funding for bonuses ranges from less than 1% to 1.5% or in some cases 2%. In addition, NRL implemented a Distinguished Contribution Allowance (DCA)—funded with 1.5% of employees' basic pay—to award outstanding performers with bonuses far in excess of ordinary merit increases. At NSWC and NUWC, employees may be granted a continuing pay increase (pay adjustment), bonus pay, or a combination of these. Additional contributions by employees may be recognized via the traditional on the spot or special act awards, although with the advent of the incentive pay system, significantly smaller numbers of these traditional awards have been granted to the workforce.

Simplified Classification

Broadbanding facilitates the implementation of simplified, generic classification standards and the use of abbreviated job descriptions. The objective of implementing the new classification system is to simplify the classification process by issuing fewer qualification standards, thus reducing the amount of time and paper work spent on classification. Under the demonstration, authority for classification is delegated to management, usually two levels above the individual classifying the position.

Participating laboratories have maintained the occupational series of the GS classification system under the simplified system. However, laboratories have allocated the series into three or four occupational or career paths: professional (scientific and engineering), administrative, technical, and support. Some laboratories combine technical and business support. Laboratories continue to use OPM classification standards to identify the title and series of each demonstration position. New standardized position descriptors have

been developed to assist managers in administering the position classification authority that has been delegated to them.

To a large degree, the increased simplification is a result of the application of automated classification systems within the participating laboratories. In addition, laboratories are also achieving increased simplification through the use of benchmark position descriptions. Classification authority is generally delegated from the laboratory director to subordinate managers at one or two levels above the position to be classified.

Performance Management

A key feature of the laboratory demonstration project is pay for performance. It is designed to shift the organizational culture from one of entitlement where pay increases are determined by length of service to one of merit where pay increases depend on performance or contribution to mission accomplishment. The Wave 1 and Wave 2 laboratories have developed different types of pay-for-performance systems around this concept. Pay increases are determined annually and are based on the individual's performance rating and/or a comparison of performance contribution and current pay. Pay pool funding comes from money that would have been spent for within-grade or quality step increases and promotions to grades within a band. In some organizations (e.g., ERDC, MRMC, NRL, and AFRL), the general increase is "at risk" and receipt of this is contingent on satisfactory performance or contribution. In other organizations (e.g., ARL, AMRDEC and the Naval Warfare Centers), the general increase is granted to all employees annually, as is the practice under the General Schedule. An employee's performance may not be determined "unacceptable" unless the employee has been placed on and failed an annual performance plan. Generally, employees who are rated "acceptable" are eligible for a payout in the form of base pay (continuing pay), bonus pay, or a combination. Table 4-7 provides a brief description of the features of each pay-for performance system.

Performance Management Systems

AFRL

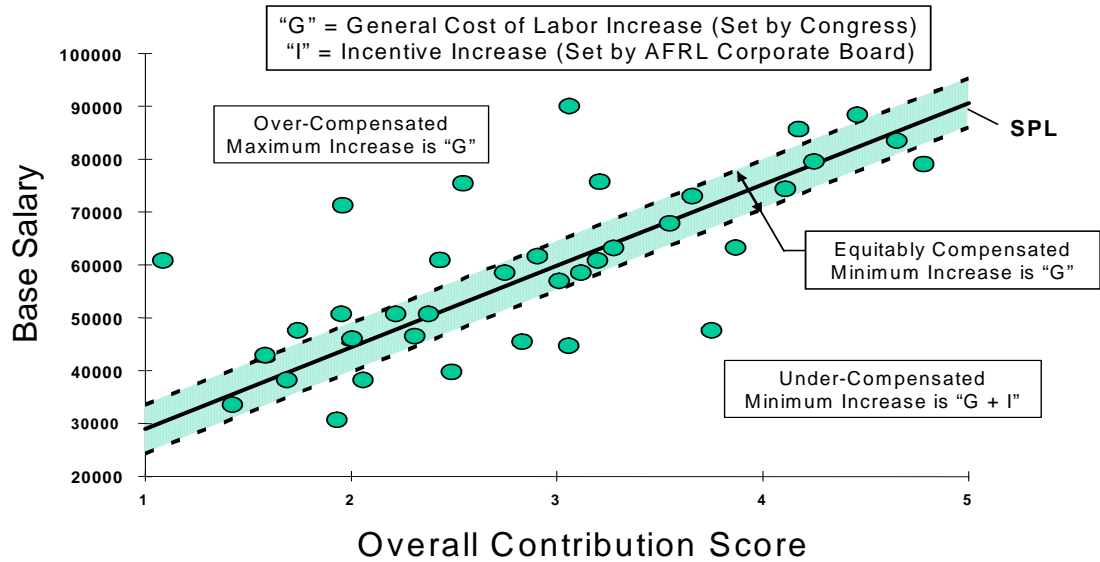
The Air Force Research Laboratory's Contribution-based Compensation System (CCS) is the model for a new integrated approach to classification, compensation and performance management. CCS measures the contribution of the employee to the mission of the organization. Employee contribution is measured on the same six factors that are used to classify positions and to assign them levels in the broadbanding system. The six factors are Technical Problem Solving, Communications/Reporting, Corporate Resource Management, Technology Transition/Technology Transfer, R&D Business Development, and Teamwork and Leadership.

Employees under the demonstration will be assigned to one of five job categories. Varying weights may be applied to the six factors based on the job categories. An individual's CCS score is determined by comparing his/her score on the six performance factors to his/her compensation. This score is plotted on a Standard Pay Line (SPL). The

pay decision for the individual is based on the “zone” in which the CCS score falls: within the rails (immediately above or below the SPL) or outside the rails (see Figure 4.1). If the score is above the upper rail, the individual is over-compensated. The goal of the AFRL system is to achieve a balance between an individual’s contribution and his/her compensation so that over time CCS scores approach the SPL.

Table 4.7 Performance Rating Systems				
Lab	Rating Levels	Rating Points	Payout Shares	General Increase at Risk
Air Force Research Lab	42 levels: 0, 1.0 to 4.90 on a continuum, and 5.9	0, 1.0 to 5.25 on a continuum, 5.9	Dollar amount corresponding to scores	Yes
Naval Warfare Centers (NAVSEA)	2 levels: acceptable and unacceptable		0-4	No
Army AMRDEC	4 levels: A, B, C, U	100	0-4	Yes
Army Research Lab	4 levels: distinguished, commendable, successful, and unsatisfactory (changed from A B, C, U)	100	0-4	No
Army MRMC	4 levels: superior, exceptional, satisfactory, and failure (changed from A B, C, F)	100	0-2	Yes
Army ERDC	6 levels: 0-5	6	0-4	Yes
Naval Research Lab	2 levels: acceptable and unacceptable	0 to 89	Percentage corresponding to scores	Yes
Army TACOM	5 levels	120	Percentage corresponding to scores	Yes
Army CECOM	2 levels: acceptable and unacceptable	50	Percentage corresponding to scores	Yes

Figure 4.1 AFRL's Contribution-based Compensation System (CCS)



Army

Most of the Army Wave 1 laboratories (AMRDEC, ARL, and MRMC) use generic performance elements and evaluate overall performance on four levels. For ARL the levels are Distinguished, Commendable, Successful, and Unsatisfactory; for AMRDEC they are the letters A, B, C, and U; and for MRMC they are Superior, Exceptional, Satisfactory, and Failure. Since not all of the employees will have the same number of rating elements, the scores are summed and averaged to determine the overall performance score. Employees with scores greater than 2.0 will be eligible for performance awards and the general increase. Each performance element is assigned a weight in a specified range with a total weight of all elements set to equal 100 points. The overall score for each individual is the sum of the performance element scores. Only employees with a grade of "C" (or the equivalent) or higher will receive general increases, performance-pay increases, and/or performance bonuses. ERDC uses generic performance elements in a six-level rating system (plus a provision to add specific work plans) with scores ranging from 0-5. The pay scores result in payout "shares" whose value varies based on the performance ratings given in the pay pool. A pool with many high performance ratings results in more shares being distributed at a lower value per share.

NAVSEA

The Naval Sea Systems Command Warfare Centers (NAVSEA) are comprised of the six Naval Surface Warfare Center (NSWC) divisions and the two Naval Undersea Warfare Center (NUWC) divisions. NAVSEA has implemented a two-level rating system called

the Performance Development System: acceptable, unacceptable. Performance goals and expectations are set by the employee and the supervisor and are based on clear expectations of products and services to be provided by the employee as well as a set of evaluation criteria to determine success. Examples of criteria may include criticality of skills, difficulty of position, individual or team contributions, and suggestions for improving processes. The amount received depends upon the number of pay points (0-4) granted. The number of pay points is determined after a review of the employee's contributions and his/her current compensation. Generally, the value of a pay point value is set at 1.5% of the mid-point of the salary range of the pay band.

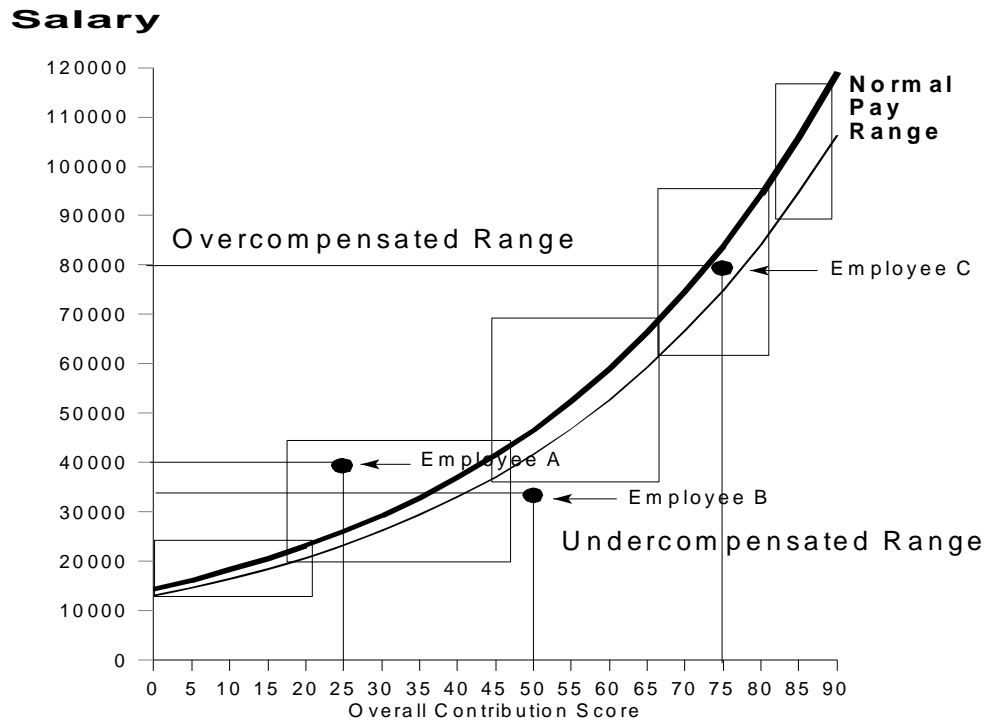
NRL

The Naval Research Laboratory's Contribution-based Compensation System (CCS) is modeled on the AFRL system and also uses an integrated approach to classification, compensation and performance appraisal by assessing the contribution of an employee to the mission of the organization on the same factors that are used for classification. This process is designed to promote increased fairness and consistency in ratings and facilitate career progression for NRL employees. Employee contribution is assessed based on career track using a common set of critical elements. Critical elements may be weighted or even determined not to be relevant for subgroups within each career track. Examples of critical elements for S&E professionals are Scientific and Technical Problem Solving, Cooperation and Supervision, and R&D Business Management.

Scores range from 0 to 89 and the relationship between score and career levels differ for each career track. Basic pay adjustments are based on a comparison of the employee's level of contribution to the normal pay range for that contribution and the employee's present rate of base pay. Supervisors and pay pool panels determine for each element where an employee's contribution should be scored, using descriptions for work at the top of each career level. Each element is judged separately and the weighted scores on all elements are averaged to obtain an Overall Contribution Score (OCS).

The pay decision for the individual is based on the relationship of the employee's OCS to the Normal Pay Range (NPR) which is current basic pay versus contribution (see Figure 4.2). Employees who are compensated below the NPR for their pay range are considered "under-compensated," while employees compensated above the NPR are considered "over-compensated." In addition to the CCS score, NRL's system provides for a separate determination as to whether an employee's performance was "acceptable" or "unacceptable" for each element. An "unacceptable" rating on any element will result in an "unacceptable" overall rating. This process was retained from the existing OPM appraisal system to provide a means for removing poor performers.

Figure 4.2 NRL's Contribution-based Compensation System (CCS)



Supervisory Panel Review

All performance ratings submitted by first-line supervisors undergo second-level review. In the demonstration laboratories, this process is lengthier because ratings are tied to pay decisions. The goal of the supervisory panel review is to have increased consistency in performance ratings within the laboratories and an increased employee perception that performance ratings are fairly distributed. In most of the laboratories, final pay determinations are made following review of ratings across organizations at the management level by a group of supervisors who allocate the final performance evaluation scores (AFRL). In some of the laboratories (viz., AMRDEC, ARL, NRL, MRMC, NAVSEA, and ERDC) final performance payout decisions rest with the pay pool managers following a similar review.

Recruitment and Development

The demonstration plans for the DoD laboratories proposed a variety of recruitment and staffing changes intended to improve the quality of new hires and to speed up and simplify the hiring process. Interventions initiated include modified term appointments, laboratory-based examining of potential new hires, extended probationary periods for new hires, distinguished scholastic achievement appointments, and voluntary scientist emeritus appointments. Table 5.1 displays staffing and recruitment interventions by laboratory. Detailed descriptions of each staffing and recruitment intervention follow, as

well as results of the interventions' effectiveness across the past five years. It is important to note that most, if not all of the laboratories evaluated for this section have only recently begun hiring again after a significant period of downsizing or time spent in a hiring freeze. This has had an effect on the use and utility of the interventions that is separate from the interventions themselves.

Modified Term Appointments

Many laboratories have adopted modified term appointments for five years, increased from the four-year limitation found in 5 CFR, Part 316. The modification also allows laboratory directors the option to renew term appointments for a sixth year as needed. An additional provision added by each laboratory allows term appointments to be converted to career-conditional status if desired. This is a highly desirable flexibility which allows the laboratories to deal with changing work loads or mission requirements.

Extended Probationary Period

Probationary periods have been extended from one year to two or three years for scientists and engineers (S&Es) at several of the DoD laboratories. The purpose of extending the probationary period is to allow supervisors more time to examine employee qualifications and to evaluate their performance before making them permanent. This also allows researchers more time to "prove themselves" before a decision is made to retain or separate them. In addition to the extension of S&E probationary periods, AMRDEC and MRMC have extended probationary periods up to two years for non-S&E staff. NRL requires a 3-year probationary period for all new hires when the nature of the work requires more than 1 year for management to assess their performance.

Distinguished Scholastic Achievement Appointment Authority

Many of the demonstration laboratories feature a distinguished scholastic achievement appointment authority.

Distinguished scholastic achievement is defined as a grade point average (GPA) of 3.5 or better on a 4.0 scale in courses for fields of study that are specified in the qualification standards for the occupational series. Although this authority existed for some laboratories prior to the demonstration, the implementation of this intervention increased the GPA requirement from 3.0 to 3.5. At the undergraduate level, candidates may be appointed at a pay level no greater than the equivalent of GS-07, step 10, provided that the criteria are met. Appointments may also be made at the equivalent of GS-09 through GS-12 on the basis of graduate education and/or experience, provided that the criteria are met.

It is important to note that the distinguished scholastic achievement appointment authority differs from the Outstanding Scholar Program, created in response to the Luevano Consent Decree of 1981. The Outstanding Scholar Program is a non-competitive appointment and had as its original intent a focus on broadening the pool of

applicants from which appointments could be made, in certain circumstances where the competitive examination had been shown to have adverse impact on specified groups. The program may only be used to hire into grades GS-5 and GS-7 in positions previously subject to the PACE exam. The distinguished scholastic achievement authority has greater flexibility, as described above, and has as its intent an increase in the quality of all new hires, regardless of their racial or ethnic background.

Voluntary Scientist Emeritus Corps

The voluntary scientist emeritus intervention allows laboratory directors the authority to offer retired or separated employees voluntary, unpaid positions in the laboratories. The primary benefit of doing so is to help the laboratories retain valuable technical expertise held by their most experienced workers. In addition, the intervention provides incentive to scientists reluctant to retire from challenging positions to do so and to continue working at their own pace while drawing an annuity. The intervention also aids in opening positions to new employees with the goal of revitalizing the workforce. Emeritus positions are not considered employment, except for the purposes of injury compensation. Candidates apply for the emeritus corps and, if selected, enter into a formal agreement concerning work schedule, duration of work, and administrative support provided by the laboratory.

Direct-Hire Authority for Non-Citizens

NRL is the only laboratory to obtain demonstration authority to hire non-citizens if there are no qualified U.S. citizens in their applicant pool. NRL's goal in instituting direct authority for non-citizen hiring is to attract high-quality candidates in order to accomplish their laboratory's mission.

Training & Development

In addition to the improvements in recruitment and staffing discussed earlier, another important objective of the laboratory demonstration program is to develop, motivate, and retain a high-quality workforce. While the pay and performance management interventions were designed in part to achieve this goal, the demonstration laboratories have also implemented a variety of programs to promote the use of sabbaticals, to revise training regulations to support further education, and to encourage new ideas and technology through professional development. Table L-1, Appendix L, displays training and development interventions by laboratory.

Since the implementation of the demonstration project, many laboratories such as ERDC, ARL, and AMRDEC have put into practice programs that increase available training and development opportunities in order to enhance employee skill levels. Some of these changes have included expanding the authority to provide payments for the earning of degrees or training certificates, as well as increasing the number of sabbaticals.

Critical Skills Training

As described in ARL's Federal Register notice: "Degree payment is not permitted for non-shortage occupations involving critical skills." Several laboratories in the demonstration project have decided to expand their authority to provide degree or certificate payment to meet critical skill requirements, and to ensure continuous acquisition of "advanced specialized knowledge essential to the organization." This intervention serves as both a recruitment and retention tool.

Sabbaticals

Although the use of sabbaticals at DoD research laboratories is not solely a demonstration project intervention, several laboratories, including AMRDEC, ARL, CECOM, and ERDC have made new provisions for sabbaticals under the demonstration system. Sabbaticals are promoted as learning or uncompensated work experiences that will contribute to development and effectiveness in the laboratory.

Modified Reduction-In-Force

To facilitate mandated reductions, reduction-in-force (RIF) regulations have been modified to better match the career paths and banding schemes. Generally, there are three major differences between modified and standard Title 5 procedures.

1. Competitive areas are defined in terms of career paths within a unit or geographic area.
2. The definition of grade has been replaced by band. For example, three grades lower would be replaced by one or more broadband levels lower since bands typically include two or more grades.

Different formulas are used for crediting additional years based on performance.