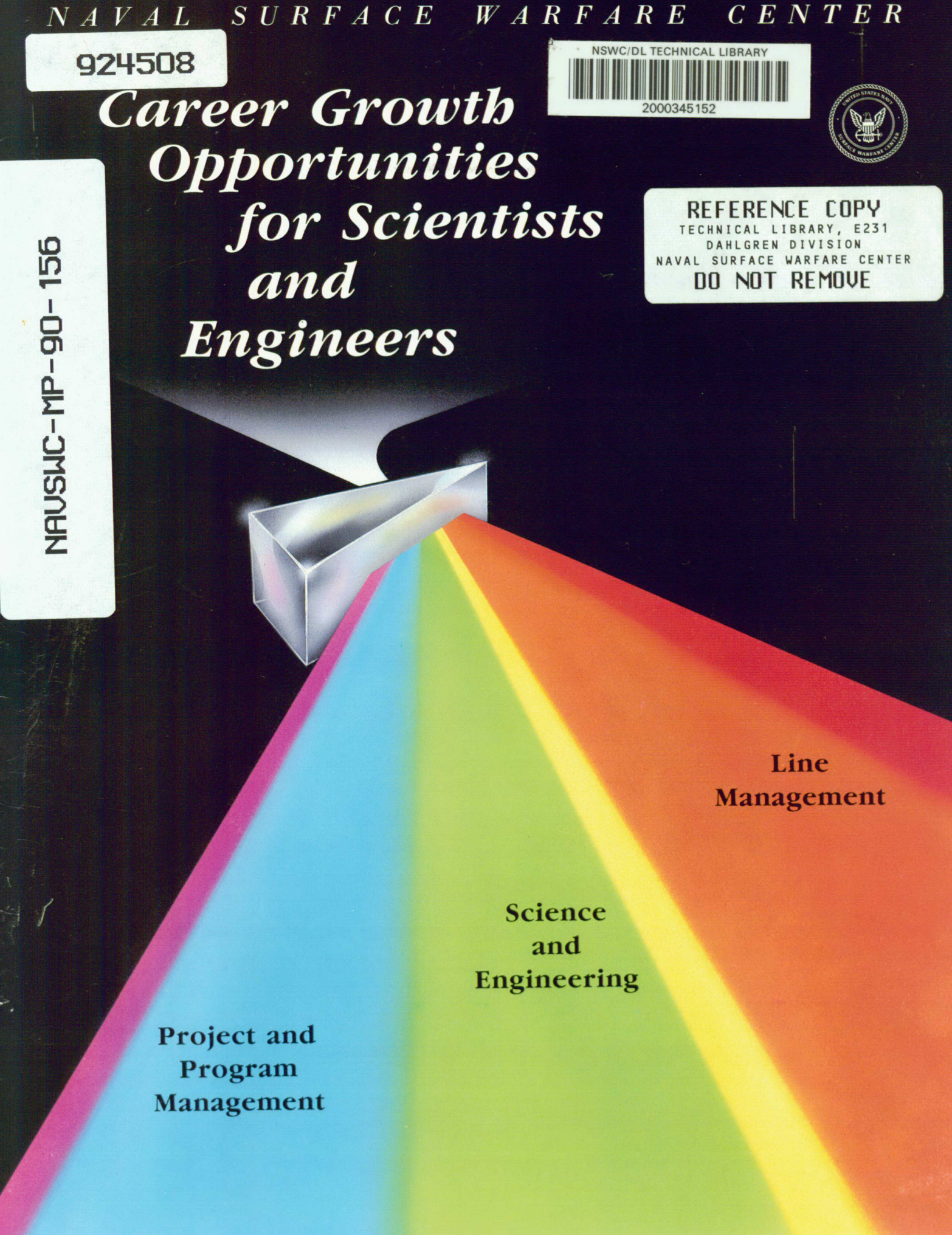
NAVAL SURFACE WARFARE CENTER

Career Growth Opportunities for Scientists and Engineers



Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
01 SEP 1990		**00-00-1990 to 00-00-1990**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Career Growth Opportunities for Scientists and Engineers	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Naval Surface Warfare Center,Dahlgren,VA,22448-5000**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**Same as Report (SAR)**	**6**	

A Statement From the Technical Director

The single most critical determinant of the success of the Naval Surface Warfare Center is the appropriate selection, development, and retention of highly trained Scientists and Engineers. By acknowledging that people have individual interests, abilities, styles, and needs, we understand the importance of being responsive to the career aspirations of these key personnel.

The purpose of this pamphlet is to provide an overview of the opportunities for career growth for Scientists and Engineers at our Center. Our management is committed to providing you with challenging and varied developmental assignments that will stimulate your intellectual and experiential growth. Through an aggressive educational and training program and with appropriate recognition and rewards for your technical accomplishments, we will strive to motivate you to advance as far as your capabilities and interests will take you.

Whatever career option you choose, the opportunities are there for you to have a significant impact on the business and future direction of the Naval Surface Warfare Center and the Navy.

Thomas A. Clare

NAVAL SURFACE WARFARE CENTER

Dahlgren, Virginia 22448-5000 • Silver Spring, Maryland 20903-5000

Career Focus

Career focus is a concept that attempts to distinguish between areas of technical leadership. The Center provides opportunities for growth in three career focus areas.

A career focus in **SCIENCE AND ENGINEERING** (S&E) emphasizes leadership through the personal performance of science and engineering work from research through fleet support. General responsibilities include:

- conducting scientific or engineering studies or developing products to advance the state-of-the-art in a particular technical field
- continuous upgrading of technical skills
- being a role model and mentor for junior scientists and engineers
- being a technical resource and consultant to Center, Navy, and outside (national and international) organizations

A career focus in **PROJECT AND PROGRAM MANAGEMENT** (P&PM) emphasizes leadership through the management of, and overall responsibility for, a particular project or program. General responsibilities include:

- planning, tasking, controlling, and reporting necessary to achieve project objectives
- using a broad technical knowledge in the project or program area
- using technical competence in a specialty area

A career focus in **LINE MANAGEMENT** (LM) emphasizes leadership through the management of, and overall responsibility for, a particular organizational unit. General responsibilities include:

- developing people
- using a strong technical background in the work unit's area of specialization
- planning and guidance around work unit goals, objectives, priorities, and structure
- administering money and materials to support programs and policies
- being a representative and communicator for the work unit

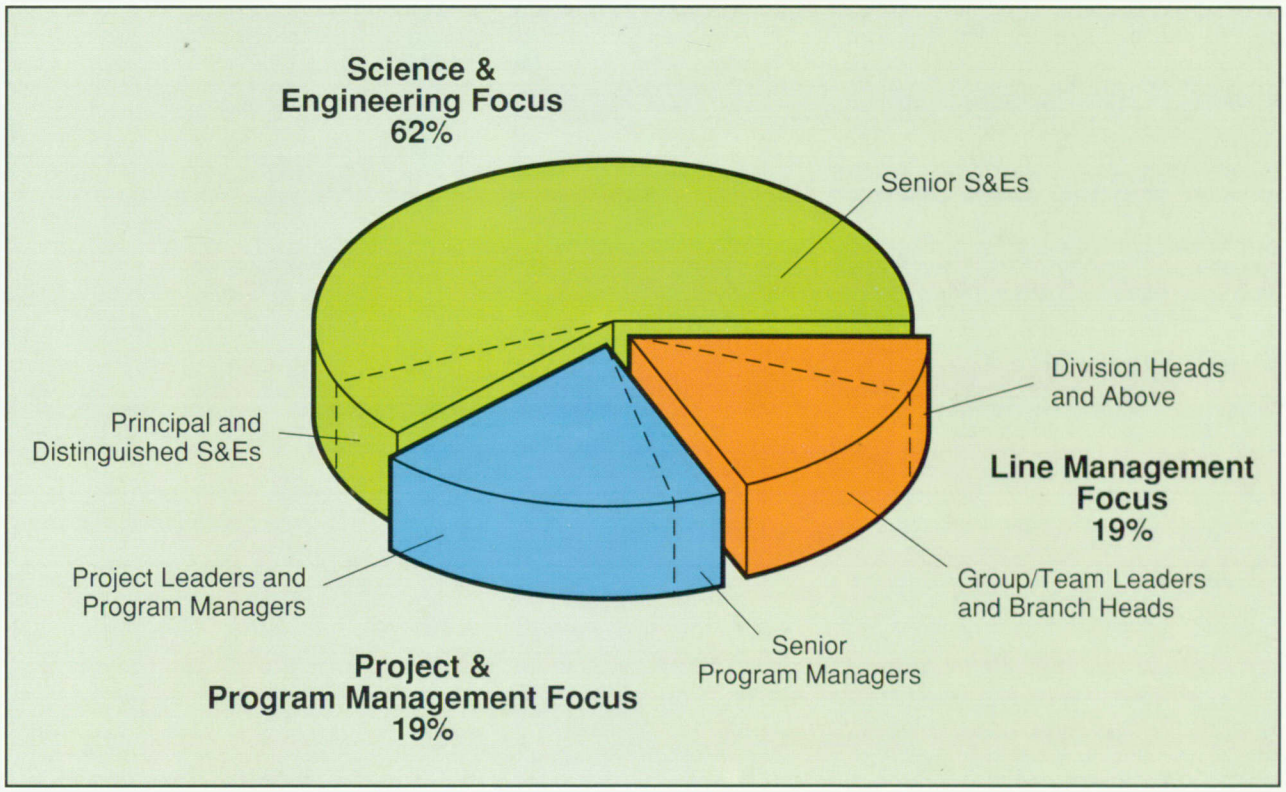
At our Center, increased responsibility within each focus area is acknowledged by the descriptors shown below. Typical federal pay plan and grade ranges are shown in parentheses.

Line Management Focus	Science and Engineering Focus	Project and Program Management Focus
Group or Team Leader (GM-13)	Scientist or Engineer* (GS-5 through GS-12)	Project Leader or Program Manager (GM-13 and 14)
Branch Head (GM-14)	Senior Scientist or Engineer (GM-13 and 14)	Senior Program Manager (GM-15)
Division Head, Deputy Department Head (GM-15)	Principal Scientist or Engineer (GM-15)	Executive Program Manager (SES)
Department Head, Deputy Technical Director, Associate Technical Director Technical Director (SES)	Distinguished Scientist or Engineer (ST and equivalent GS Supergrades)	

*Titles of Scientist or Engineer imply the appropriate technical discipline (e.g., Senior Mechanical Engineer, Principal Computer Scientist, Mathematician)

fact	Implication for Career Growth
Career focus is a dynamic concept.	Your primary career focus may change and is a function of your particular interests and abilities and organizational needs and opportunities.
Seventy percent of all advanced-level scientific and engineering positions require knowledge and skills from more than one focus area.	Even though your career will have a primary area of focus, the acquisition of knowledge and skills from all career focus areas is encouraged.

Distribution of Scientists and Engineers According to Primary Career Focus



Career Progression

Career progression at the Naval Surface Warfare Center incorporates the dynamics of individual career choice. There is no single recommended or defined avenue for advancement. You will generate a career path based on your individual needs and those of the Center. Key points to remember are:

- development and experience in the early years of your career will help you to decide which career focus area best suits your interests and abilities
- progression to advanced positions is dependent on your initiative, ability, and experience with respect to clearly stated performance expectations
- career progression can occur laterally or vertically within or across focus areas

General Criteria for Advancement

Science and Engineering Focus

- demonstrated technical excellence
- impact of work on the technical community
- contributions as a role model and mentor for junior scientists and engineers
- effectiveness as a technical resource and consultant to Center, Navy, and outside organizations
- ability to communicate orally and in writing

Project and Program Management Focus

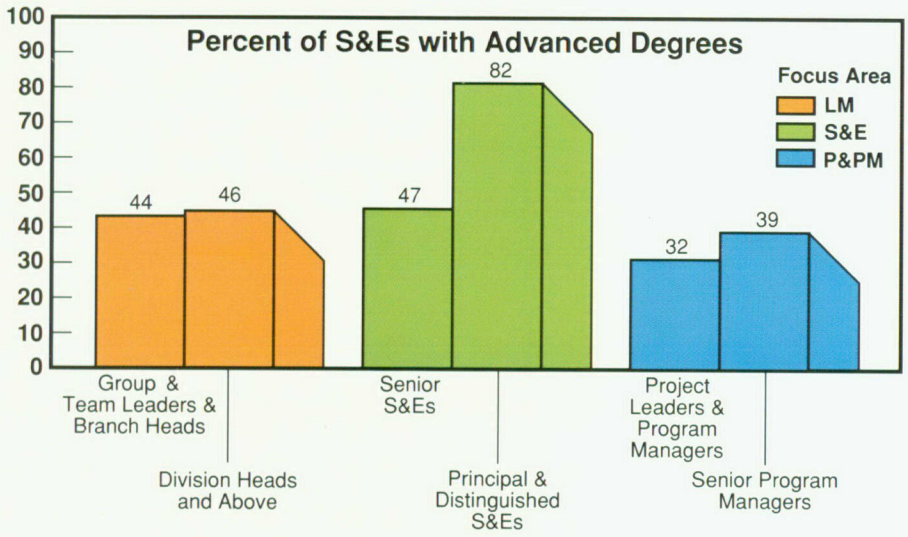
- ability to manage projects and programs
- development of a broad technical knowledge of the program area and of system engineering principles
- technical competence in a specialty area
- ability to communicate orally and in writing

Line Management Focus

- ability to manage an organization
- development of a broad technical background in the work unit's area of specialization
- ability to supervise and establish effective interpersonal relationships
- ability to communicate orally and in writing

Career Progression and Academic Education

Continuation of your academic education is encouraged by all levels of Center management. Forty-six percent of all advanced-level Scientists and Engineers hold masters or doctorate degrees.



Career Development Methods

The Center's policy is to provide the climate, motivational support, and developmental opportunities to help you in career planning and decision making. A wide array of training methods and strategies are utilized to prepare you for the career challenges that lie ahead. Assistance in identifying training needs, selecting training sources, and preparing your development plan, as well as more detailed information on specific training and educational programs, are available from our Human Resources Department, Employee and Organization Development Division, at any time. Key points to remember are:

- learning is a lifetime proposition
- there are many paths and developmental opportunities to consider in pursuit of your career goals
- much career development activity is accomplished on the job
- you must develop the appropriate competencies that will enable you to meet demanding performance expectations
- advancement is neither automatic nor accidental and depends on both personal attributes and qualifications as well as organizational needs and opportunities

Training and Education Opportunities

Management Development	Academic Development	Technical Development	On-the-Job-Training (OJT)
Naval War College, Program Manager Training, Supervisory Development Program, Leadership and Management Development Program (L&MDP), Legis Fellows, Navy Scientist Training and Exchange Program (NSTEP), Navy Science Assistance Program (NSAP)	Academic Support Program NSWC Fellowship Program • Part-time basis • Full-time basis	On-site and Off-site Continuing Education Courses, Self-Study Programs, Membership in Professional Societies, Attendance at Conferences and Seminars, Navy Scientist Training and Exchange Program (NSTEP), Navy Science Assistance Program (NSAP)	Career Development Program for Scientists and Engineers, Specific Ongoing Tasks and Duties, Rotations and Details, New Work Assignments

The Career Planning Process
(a shared responsibility)

Career planning is an ongoing process which requires time and commitment. It is your responsibility to take ownership of your career direction, with management and the organization playing a supportive, collaborative role. For effective career planning, each party must assume the responsibilities indicated. Remember that career planning is based upon the needs of both the individual and the organization; therefore, communication is essential.

Career Development Responsibilities

Individual

- take responsibility for your own career development
- help to establish and to meet objectives and performance requirements on current job
- engage in realistic self-assessment
- obtain and utilize feedback on career options and realistic potential
- communicate career interests and discuss developmental needs with supervisor
- actively follow through on developmental plans
- seek out and use mentors

Supervisor

- support employees in their career development responsibilities
- establish and communicate job requirements and responsibilities
- provide open and honest ongoing performance feedback and coaching
- encourage and enable mentors to help individuals
- provide organizational career information and realistic feedback on employee career aspirations

Organization

- communicate business mission, objectives, and strategies so that realistic career development can occur
- provide information on organizational options and opportunities
- train supervisors and managers to coach, evaluate, and conduct employee career discussions
- provide employees with the resources necessary for development, to include on-the-job experiences, training, and education
- evaluate and recognize supervisors and managers for their role in employee career development

Summary of Key Points

- The Center provides Scientists and Engineers the opportunity to focus their careers in science and engineering, project and program management, and line management
- Sixty-two percent of our advanced-level Scientists and Engineers report science and engineering as a primary career focus.
- Selection of a career focus is not a one-time decision and often changes throughout one's career.
- There are no defined career paths; they are generated through a series of interactions between individual employees and the organization and are based upon the needs of both.
- Technical competence is the foundation for growth in all career focus areas.
- The Center encourages all Scientists and Engineers to take advantage of training and educational opportunities. Forty-six percent of our advanced-level Scientists and Engineers hold masters or doctorate degrees.
- Career planning is a shared responsibility between you, your supervisor, and the organization; however, you must take ownership for planning your own career.
- Become familiar with specific career development guidelines and requirements for your technical department.