Career Planning
NSWC, Dahlgren
28 June 2013
Alan J. Dean

"Let him who would move the world
--- first move himself"
Socrates
Operation Odyssey Dawn

- 24/7 Distance Support to CTF-69 and 3 submarines, including USS Florida
- Results: 8 missiles recovered and subsequently launched
- Strike Reconstruction Analysis performed for SUBFOR, OPNAV, and PEOs

Tomahawk

Bunker Busters: Thermobarics

- BLU-118/B Thermobaric Bomb for tunnel defeat capability - 67 days
- Thermobaric Shoulder-Launched Multipurpose Assault Weapon (SMAW-NE) - 9 months

JSOC / SOCOM Support

- Leading DoD life-cycle support capability for electro-optics.
- Special weapons
- Maritime mobility

Enhanced Distance Support

- Currently averaging 4300 Fleet calls per month
- Significantly improved turn around time due to reduced ship visits.

Armored HMMWVs

- Improved Marine Corps Armor Kit (MAK)
  - Polymer and ceramic expertise
  - Blast modeling and simulation expertise
  - Shop fabrication capabilities

Fleet interface:

- Over 24,400 total Technical Assists
  - * Includes CASREP and non-CASREP, on site and remote assistance

USS Hartford Temporary Electronic Imaging System

- Unexpected, urgent Fleet requirement - Both periscopes damaged beyond repair
- Rapid response design, assembly, and installation of new imaging system

Submarine Unmanned Aerial System (UAS)

- 2012 PACRIM Exercise "live fire" CONOPS involving USS North Carolina and HMAS Farncomb.
- UAV deployment from submerged posture with hand-off to coalition partner
- Providing subs with Over the Horizon targeting and Battle Damage assessment (BDA)

Small Unit Riverine Craft

- Provides sustained, conventional reachback operations - MEF
- Currently deployed under I MEF in support of OIF II

Unique capabilities that only Warfare Centers can provide

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Where We Are…

- Provide research and development (R&D), test and evaluation (T&E) for the future Navy and in-service engineering and logistics support to the current Navy
- Business-based enterprise operating under the Navy Working Capital Fund (NWCF)
- Aligned under 133 Technical Capabilities across 9 Divisions
- Diverse and highly educated workforce focused on innovation (~14,700 scientists, engineers, and technicians with over 600 Ph.D.s)
- Maintain and operate unique research, development, test and evaluation facilities
What We Do…

The life-cycle of Navy systems is long: spanning 30 years or more. Warfare Centers provide continuous support from cradle to grave.
Provide research, development, test and evaluation, analysis, systems engineering, integration and certification of complex naval warfare systems related to surface warfare, strategic systems, combat and weapons systems associated with surface warfare. Provide system integration and certification for weapons, combat systems and warfare systems. Execute other responsibilities as assigned by the Commander, Naval Surface Warfare Center.
Almost 95 years of providing capabilities and innovative solutions in the areas of weapons and sensor systems, and combat systems.
Representative Technical Roles

- **Specialty Site** for Naval Surface Weapons Systems Integration
- NAVSEA 05 Technical Warrant Holder Resident on Campus
  - Combat and Weapon Control Systems – Surface Ship; Guns – Surface Ships; Launcher Systems – Surface Ship (except USW); Missiles - Surface Ship; Radar and RF Systems – NAVSEA (except submarines); EMI Control/EMC/EMP/RADHAZ – Surface Ship; Displays & Human Factors Engineering, Directed Energy & Electric Weapons

- **NAVSEA’s** Technical Expert for Directed Energy & Rail Gun

- Software Design Agent for SLBM Fire Control and SSGN AWS Launch Control

- **LSEA for Aegis Combat System**

- **ISEA for Aegis Weapons System Computer Programs**

- Trusted Agent for Safety, Lethality, E3, Integrated Topside Design, Anti-Tamper, CBR

- **TDA/DA/AEA/SEA for many programs, including:**
  - Launchers, CEC, Q70, Shipboard Protection System, Navy Identity Dominance System, Joint Expeditionary Forensics Facilities, CBR Collective Protection Systems, CB Detection, Decontamination and Information Systems, VLS SW, CADRT

- **Certification Agent** for Surface Warfare Systems

- System Development Activity Lead for Tomahawk Weapon Control System

- Coordination Agent for Aegis Combat System IA Efforts

- Joint PM for Collective Protection

- **JPO-CB Defense** Host office

- **JCTD Technical Manager** for Joint Force Protection Advanced Security Systems
So You Want to Build a Career

Is a Career and an Occupation the Same Thing?

What Are You Good At ------- What is Your Passion
How Do You Define the Word Career?

Comes from Latin *carrieria* for street or *carraria* for road for vehicles

A course of action or events -- occupation followed as a life's work - Websters

“In my eyes, a career is the vehicle in which you make your mark on the world. As a Naval Officer, I can vividly recall each tour, the mark I made (good and bad), and the contribution I made to national defense ...”

Captain Kadowaki
Foundations
As Early As 1950
Career Became More Than an Occupation*

- Happens Over a Lifetime
- Is Developmental
- Changes Over Time
- Includes Life Roles
- Is a Process not an Event

*It’s like connecting a series of dots through time

* Super, D.E. Vocational Adjustment: Implementing a Self-Concept, 1951
Career Steps
(Underlying Continuous Learning Process)

- Opportunity & Competitive Criteria
- Full Performance Level
- Early Development
- Senior
- Exec

Career Steps:
- Individual Growth
- Organizational Contribution
- Repeated Cycles of Movement, Apprenticeship, Growth
- (Underlying Continuous Learning Process)
Connecting Career Dots
(A Series of Roles)

“All the world is a stage, And all the men and women, merely players,
They have there exits and their entrances; And one man in his time plays many parts.”
-William Shakespeare

Personal Growth; Organizational Contribution; Decision to Leave
Questions for Today

What is Affecting Careers Today?

What is The Career Process?

What Affects Career Decisions?

Who has Roles and Responsibilities?

How Do You Develop a Career Roadmap?

Where are the Opportunities to Learn?
What is Affecting Careers Today


• Globalization
• Technology
• Change in Demographics
• Organizational Restructuring
• Intellectual Capital
• Speed of Change
• Cost Controls

“Everything is in a State of Flux, including the status quo.”
- Robert Byrne

“Change is the Only Constant”,
- Heraclitus, ~500 B.C.

All in the Context of a Diverse Workforce
Workplace Realities

Old Workplace Contract

Stability & Predictability
Permanence
Standard Work Patterns
Valuing Loyalty
Paternalism
Job Security
Linear Career Growth
Onetime Learning

New Workplace Contract

Change & Uncertainty
Temporariness
Flexible Work
Valuing Performance & Skills
Self-Reliance
Employment Security
Multiple Careers
Lifelong Learning
What Is The Career Planning Process?


- C) Input
  - Current State

- A) Output
  - Future State

- IDP

- D) Follow-Thru

- Life-Long Learning

- B) Feedback (Skills & Competencies)
Failure to Believe in Success
Lack of Commitment to the Plan
Insufficient Time and Resources Allocated
Day-To-Day Pressures Dominate
Focus Limited When Priorities Not Set
Unwilling to be Visionary, Proactive & Creative
Tough Choices are Avoided
Changing Priorities Among Family
Poor Communications
What Affects Career Decisions?

Opportunity

Personal

External

Events of Change

Decision Frames

Self

Family

Work
Decision Frames

**Self**
- Values
- Interests
- Skills
- Accomplishments
- Working Style
- Passion (s)
- Motivation

**Family**
- Family Needs
- Significant Other Goals
- Financial Situation

**Work**
- Enjoy the Work
- Personal Growth
- Leave With a Good Feeling

Attitude + Energy + Support = Success

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*Matlz & Grahn, A Fork in the Road, A Career Planning Guide for Young Adults, 2003

**Dr. Jim Colvard
Who has Roles and Responsibilities?
An Balanced Partnership

- Joint Ownership/Retention of New Employee
- Defining Skills Requirements for Today & Future
- Developmental Work Assignments/Funding
- Roadmap Development
- Mentoring Efforts
- Employee Evaluation/Promotions
- Department Orientations

- Support Efforts
- Complementary Goals

Organization

Family

Employee

- Participate/Perform Activities
- Ask Questions
- Indicate Job Interests
- Plan Career Roadmap
- Identify Indicators of When to Leave
- Pursue Training/Opportunities
- Self/Rotation Evaluations
Connecting Career Dots
(Lifelong Learning Exercise)

Various Jobs

Graduate As EE

Software Modifier

HW/SW Designer

Group Leader

Program Manager

SLBM Branch Head

Senior Tech Staffer

DL Corp Staff

ASW Branch Head

MSEE Degree

NWC Diploma

MA Degree

Special Topic, Management, and Leadership Training

“Over the long run, superior performance depends on superior learning.”
- Peter Senge
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<th>Competencies</th>
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<th>Development Assignments</th>
<th>Leadership Activities</th>
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Target: Career

**Competency/Activity Roadmap**
Perspectives to Success

“I believe you can consider yourself successful in a tour or a full career if you can look back and say that you've done everything you can to further the mission of the organization you belong to. In my case, that usually means that I try to create the environment so that others can do their work as efficiently and with minimum distractions, since it isn't usually me that does the mission-accomplishing work.”

Captain Smith

Accept the past, focus on the future, and anticipate
Where Are the Opportunities to Learn?

Job Openings

Jobs Looking for People

External Assignments

Co-Lateral Duties on Advisory Panels, IPTs, Corporate Efforts

Volunteer Efforts

“Work & play are words used to describe the same thing under differing conditions”
- Mark Twain
Dahlgren Tools for Career Planning

Employee Familiarization Program (EFP)

The Employee Familiarization Program (EFP) is a series of online, classroom, and on-location modules that offers government employees,

NSWCDD Academic Training and Opportunities

At NSWCDD, academic education is our primary means of developing a workforce ready to take on the challenges of today and tomorrow. As such, Dahlgren Division is committed to offering and supporting academic programs which provide a quality education at reasonable cost in disciplines relevant to our mission needs.

Defense Acquisition Workforce Improvement Act (DAWIA)

The Defense Acquisition Workforce Improvement Act commonly known as DAWIA was signed into law in Nov 1990 to improve the effectiveness of the military and civilian acquisition workforce. It establishes education and training standards and requires certification for personnel designated as acquisition workforce (AWF) members. Certification is attained by satisfying a combination of education, experience, and training requirements. Approximately 77% of the NSWC Dahlgren workforce are acquisition workforce members.
Dahlgren Tools for Career Planning

New Employee Development Program (NEDP)

The New Employee Development Program (NEDP) was designed to assemble developmental opportunities for new NSWC Dahlgren employees under one umbrella. Some components are required of new employees and some are optional, so be sure to carefully review the requirements of each and discuss the program with your supervisor. All new employees at NSWC Dahlgren are highly encouraged to participate in the NEDP.

NSWCDD Mentoring Program

A mentoring relationship is a reciprocal learning partnership in which participants work collaboratively to develop a mentee's knowledge, skills, abilities and/or thought processes through an exchange of different perspectives. This can be done formally through documented goals and objectives or informally. Employees can benefit from different types of mentoring partnerships at different stages of their career. Whether you are transitioning to a new branch, looking to develop your technical skills, or are working towards long-term professional goals, the NSWCDD Mentoring Program can provide you with resources and assistance for cultivating mentoring relationships that grow and change according to your professional objectives.
A Continuing Evolution

NSWC Dahlgren: A Legacy of Evolution & Revolution


Systems Engineering

- Combat Systems
- New Warfare Concepts
- Ballistic Missile Defense
- Integrated Warfare Systems

Computational Sciences

- Targeting
- Strategic Fire Control Computation
- Digital Fire Control

Research & Development

- Math, Physics, Chemistry, Engineering
- Integration of Unmanned and Autonomous Systems
- Advanced Sensors

Test & Evaluation (Build a Little; Test a Little; Learn a Lot)

- Electric Weapons
  - Multi-use (Sense, ID, Engage)
  - Scalable effects
  - Lower cost
- Advanced materials
  - Topside Design
  - Control of RF environment
- Distributed Networked Systems

TODAY and the Future

Test & Evaluation (Build a Little; Test a Little; Learn a Lot)
Firsts

- **First Gun Firing** – 16 October 1918
- **First Radio Controlled Airplane in collaboration with NRL** – 1924
- **First testing of 16-inch HC (High Capacity) projectiles** (1938)
- **World's first operational 6 DOF trajectory simulation. Completer 1950. Developed for the 12.75 inch diameter antisubmarine rocket (Weapon A).** Dr. Charles Cohen
- **First error-checking (for machine error) methods built into a general purpose computer. For NORC, 1955**
- **First fully autonomous infrared guided munition in the world (5-inch IRGP)** - 1974
- **First Joint warfare and targeting analysis capability** – 1994
- **Patents** – 386 since 1986
- **Rail Gun in Collaboration with ONR (& others)** – Famous First with Each Firing – 2000s
Takeaways

Partnership Between You, Your Family and the Organization with Each having Specific Roles

Change Demands Continuous Skill/Competency Development

Career Planning Process Provides a Roadmap

Your Career is Your Career

How Are You Going To Connect the Dots?

“Knowledge Without Action is Worthless”
- Donna Tyson, ALC, Oct 2003

“How Human Capital is Our Technology”
- Dale Galyen, ALC, Oct 2003
References


The End