

Capable Manpower

Sailors and Marines must be fully prepared to fight and win in an information-rich, distributed battlespace. We can give them the edge with affordable human-centered hardware and systems developed out of a thorough knowledge of human capabilities, limitations, and needs. Our objective is to get the right warfighters into the right job, at the right time, with the right tools.

Why is this Future Naval Capability important? We cannot operate twenty-first century forces with an approach to manpower rooted in the nineteenth century. Our operational doctrine expects far more of the individual Sailor and Marine than ever before. We have to compete for talented volunteers and work hard to retain them. Attracting them, training them, retaining them, and enabling them to work up to their potential form one of the Navy's and Marine Corps' greatest challenges. We will meet that challenge only if we provide Sailors and Marines with the best possible quality of service.

What's our investment strategy? In developing our core investment program, the Capable Manpower FNC IPT focused on identifying and filling capability gaps, fulfilling commitments to funded acquisition programs, and designing a strategy that would provide the wherewithal to execute the program. Three enabling capabilities will get us there; they are of *equal priority*:

- **Acquire.** We need to recruit and match Sailors and Marines to the right jobs at the right times.
- **Design.** We need to design affordable systems centered on the warfighter.
- **Equip.** We need to equip Sailors and Marines with effective mission essential competencies.

How are we filling the gaps in those enabling capabilities? Each enabling capability will have a set of milestones and transition opportunities.

Priority: Recruit and match Sailors and Marines to the right jobs at the right time, balancing individual needs with the needs of the Fleet and the Force.



- **In FY 2002-2007:** Whole Person Assessment. Sailor and Marine Career Management System. Personnel Situation Monitoring, Analysis and Response Technology.

Transition Opportunities:

- Computerized Officer Force Management Environment—transition to N13 in FY02.
- Enlisted Manpower and Personnel Integrated Planning System—transition to N13 in FY02.
- Training Continuum and Readiness Modeling—transition to CNET, N13, PERS-4 in FY02.
- Job and Occupational Interest in the Navy; Rating Identification Engine—transition to N13 in FY 03.
- Models of Navy compensation and personnel behavior—transition to N13 in FY04.
- Non-Cognitive Measuring systems—transition to N13 in FY 05.
- Attrition Reduction Technology—transition to N13 in FY 05
- Distribution Incentive System; Personnel Force Threat Detection —transition to N13, PERS 4, USMC/DCOS in FY 05.
- Artificial Intelligence Data Quality Tools—transition to N13, USMC/DCOS in FY 05.
- Cross-Functional Policy Analysis System—transition to N13, PERS-4, USMC/DCOS in FY 05.
- Web-Based Marketplace for Sailors, Marines, and Jobs—transition to PERS-4, USMC/DCOS in FY 06.
- Career Case Manager Technologies—transition to PERS-4, USMC/DCOS in FY 06.
- Culture and Values Selection; Whole Person Assessment—transition to N13 in FY 07.
- Integrated Whole Person Assessment System—transition to N13 in FY 07
- Integrated Sailor/Marine Career Management System—transition to PERS-4, USMC/DCOS in FY 07.
- Personnel Cost/Quality Tradeoff Model—transition to N13, USMC/DCOS in FY 07.
- Integrated Personnel Situation Monitoring, Analysis, and Response Technology—transition to N13, USMC/DCOS in FY 07.

Priority: Provide methods, models, and tools to aid the designers in their goal of warfighter-centric design

(systems that are explicitly designed to support the warfighter, improving total system performance and affordability and reducing the probability of human error).

· **In FY 2002-2007:** Design Support Tools. Advanced Interface Design/Training Capability

Transition Opportunities:

- System Functionality Capture Tool—transition to PEO (S) in FY 03.
- Prototype Advanced Land Attack Warfare Human Interface—transition to PMA 282, PMS 529 in FY 03.
- Functional Software Requirements and UML code for the Human Interface Design—transition to PMA 282, PMS 529 in FY 03.
- Assessment of Operator Proficiency/Skill Requirements for TLN Phase II—transition to PMA 282, PMS 529 in FY 04.
- Embedded and Internet Training Capability— transition to PMA 282, PMS 529 in FY 05.

Priority: Equip Sailors and Marines with effective mission-essential competencies when and where needed, at an affordable cost.

· **In FY 2002-2007:** Advanced Distance and Distributed Learning. Objective-based On-the-Job Training and Maintenance Support for Individuals and Teams. Virtual Technologies and Environments. Visualization-based Training and Support Systems.

Transition Opportunities:

- Learning Technologies for Technical Courseware— transition to CNET, USMC in FY 03.
- Deployable Sonar Operations Training—transition to COMSUBLANT, COMSUBPAC, N77 in FY 03.



“Nothing is more important to our Navy than recruiting Sailors, retaining Sailors, and attacking attrition of Sailors. The quality of service alignment priorities directly affect our ability to retain the people we need to make our Navy work. I need the involvement of every leader at every level to achieve our goals.”

—Admiral Vern Clark, Chief of Naval Operations

- Intelligent Agents for Real Time Scenario Modification— transition to CNET in FY 03.
- Assessment Tools for Effective ADL Delivery—transition to CNET in FY 03 through FY 07.
- ADL Authoring Technologies for Technical Courseware— transition to CNET in FY 03 through FY 07.
- Authoring Tool for Fleet Developed Measures of Performance—transition to PMS-430 in FY 03 and FY 04.
- Virtual Technologies and Environments for Combat Vehicles (AAAV and LCAC)—transition to PMS 377, MCCDC in FY 04.
- Advanced Learner Support Tools for ADL—transition to CNET in FY 05.
- Web-based Locator/Tutor for Mentoring, Coaching and Knowledge Management—transition to CNET in FY 05.
- Technologies and Methodologies for Debriefing Multi-Platform Exercises—transition to CNET in FY 05.
- Multi-Media and Collaborative Visualization systems for Sensor Operations Training for Individual Operators, Sonar or Aircrew Teams, and for Officers/Tacticians—transition to N74 in FY 05 .
- Team Training Across Multiple Platforms—transition to CNET in FY 06.
- Team Training Tools for ADL—transition to CNET in FY 07.
- Advanced Technologies for IETM Development and Delivery—transition to CNET in FY 07.
- Close Quarter Combat for Military Operations in Urban Environments—transition to N759, MCCDC in FY 07.
- Collaborative Networked Visualization Systems for Battlegroup and Theatre Multi-Sensor Employment Training, Planning, and Decision Support—transition to N77, N74, PMW 185 in FY 07.
- Full-Spectrum Virtual Environment Integrated Combined Arms Combat System—transition to N759, MCCDC in FY 08.

What’s some of the sustaining discovery and invention science and technology? Exploitation and delivery depend upon discovery and invention. In ONR’s vertically integrated program, we will continue to exploit basic work that proves relevant to capable manpower.

- **Human performance** research will continue to advance this FNC.
- **Operational environments** must be understood with a view to giving human beings the ability to operate under diverse, challenging conditions.