Human Performance Center

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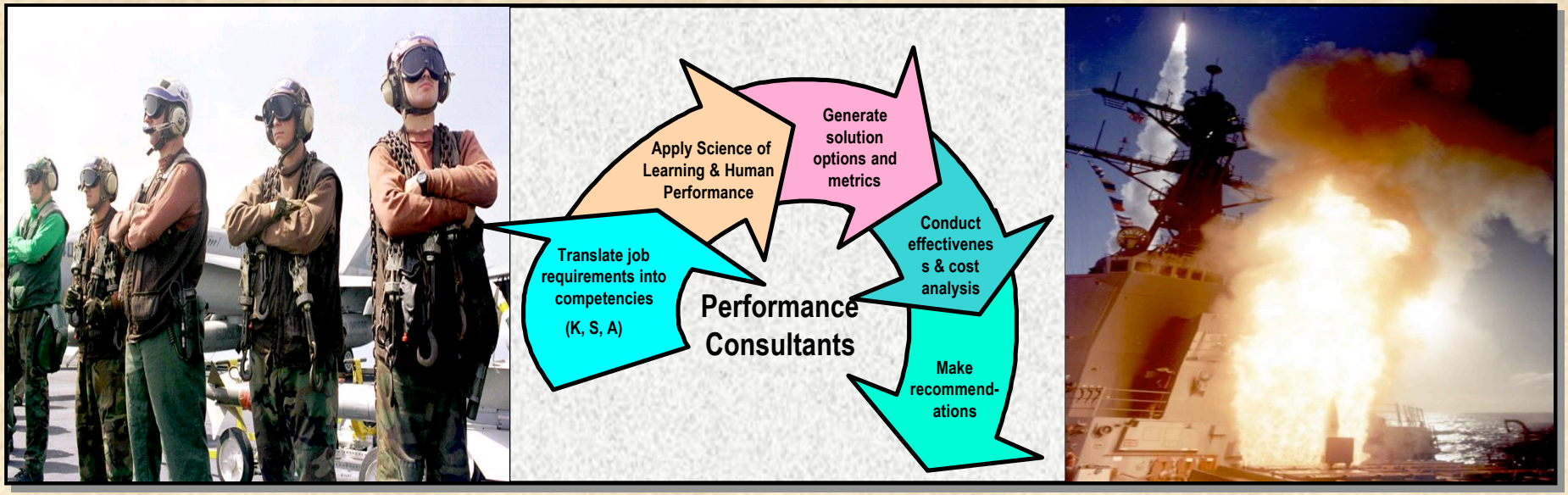

2003 Undersea Human/Systems Integration Symposium

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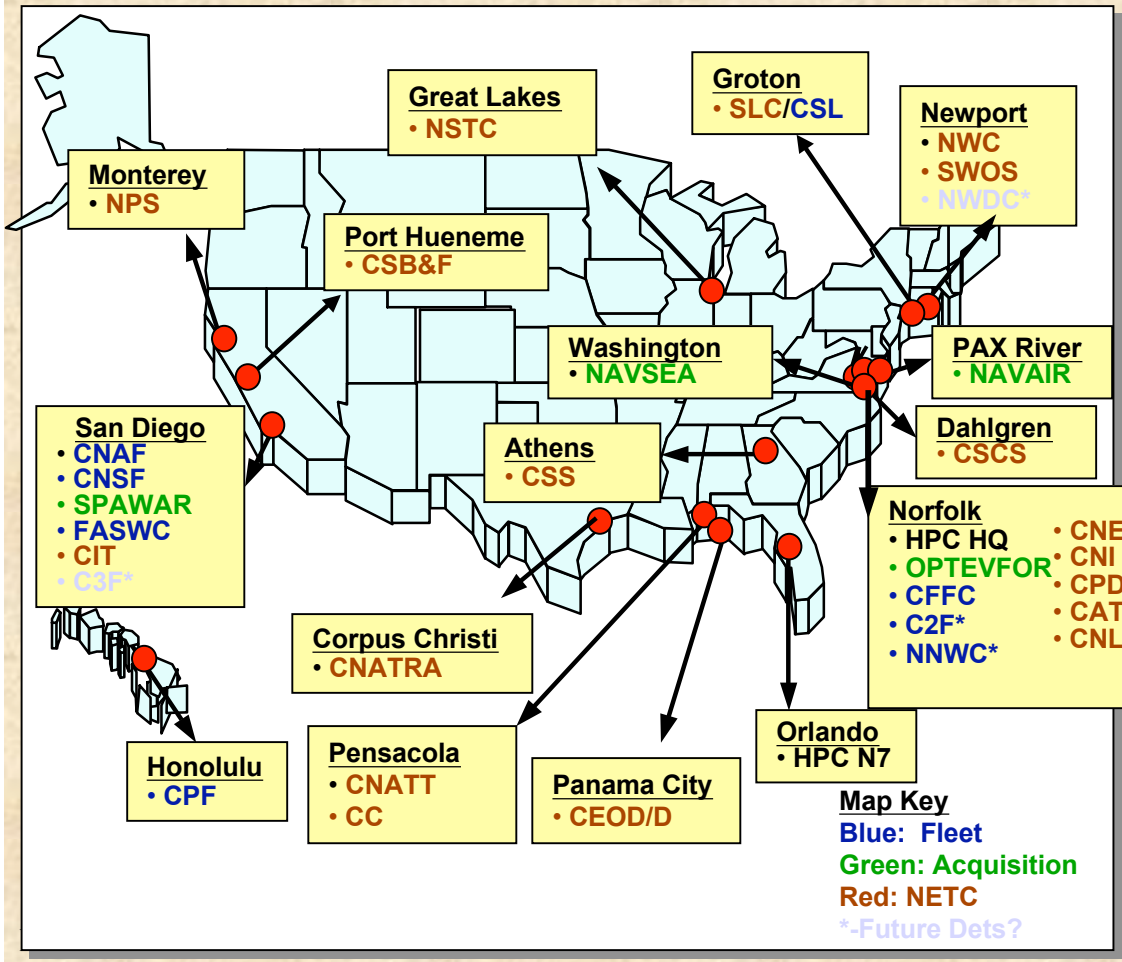
HPC – Phased Implementation

The HPC … A corporate Navy organization supporting the Sailor (NETC/CNP), the Fleet and the Acquisition community



- **FY02 (TFE HP Cell)**
- **FY03 (Provisional HPC)**
  - 16 sites
  - 75-85 temporary personnel
  - NPDC & NSTC
- **FY04 (HPC)**
  - 29 sites
  - 171 permanent personnel (141 Civilian, 30 Military)
  - Formal Training
  - Fleet, Acquisition, CNATRA, NWC, NPS
  - Current Manning

	Temp	Perm	FY04 Goal
Mil	5	3	30
Civ	13	56	141
Contr	19	N/A	N/A
Total	37	59	171

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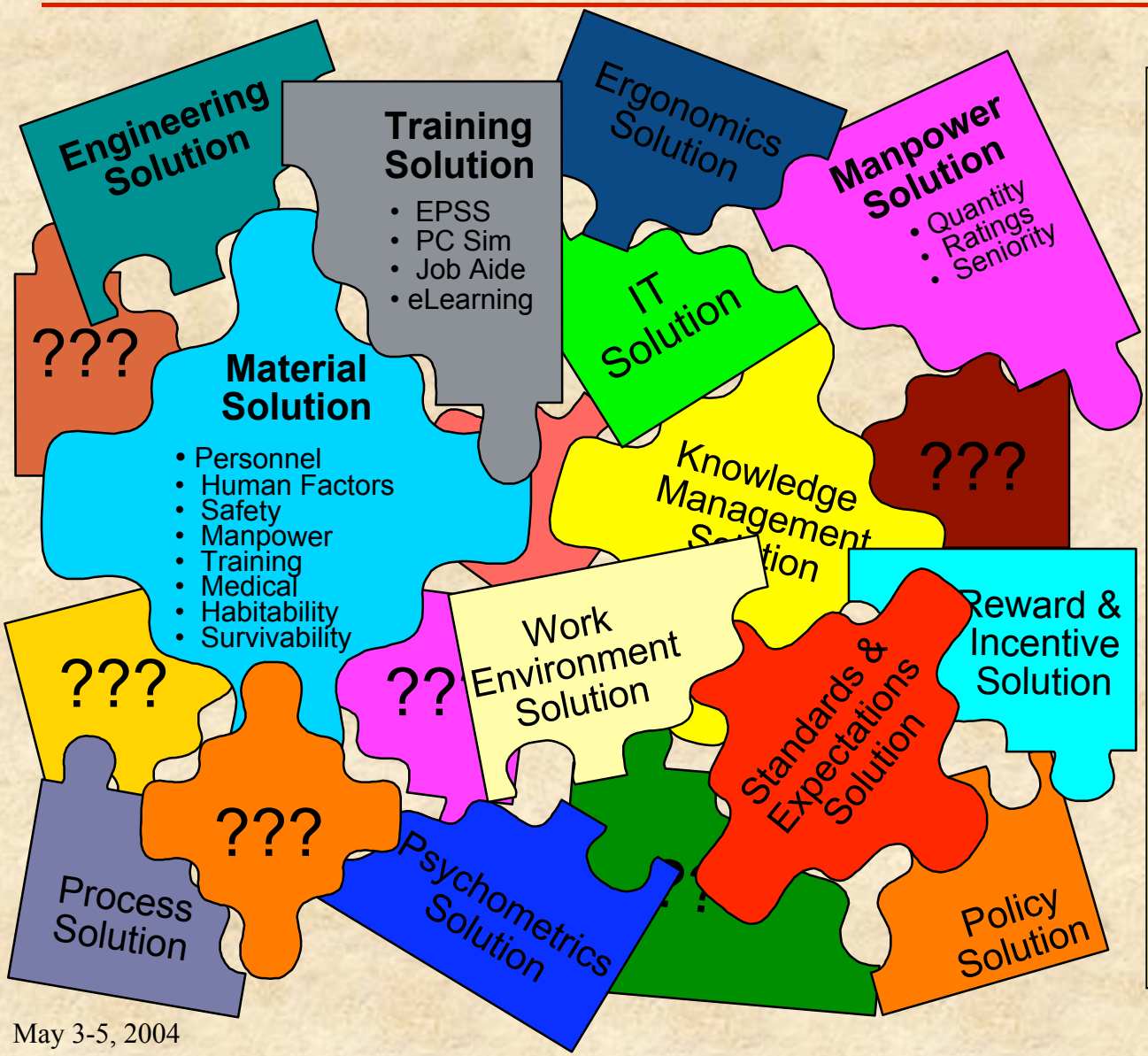
What is Human Performance?



- Human Performance addresses all factors that impact the ability of personnel to achieve the desired level of performance.
- Performance deficiencies are evaluated at the individual, team and organizational levels.
- Human Performance analyses are typically focused on problems that have have resisted traditional solutions…. because they can't be solved by a single discipline.

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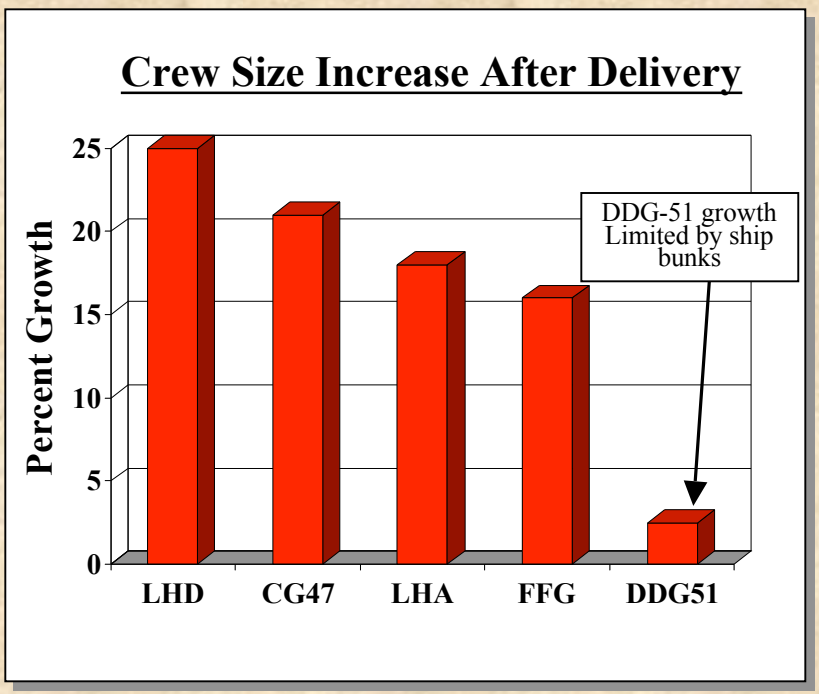
HSI Challenges

Lack of focus on the human component results in increased manning, more complex and ineffective training….increased costs & reduced performance.

ERNT 2001

- The acquisition community has historically focused on hardware delivery
  - Focus is on IOC schedule & costs…not Total Ownership Costs
  - Manpower & training not considered a key factor
- HSI has been in existence for years. A major cultural change will be required…



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HSI vs. HPI

Human Systems Integration (HSI)

- A disciplined approach to define a human's interaction with a platform, equipment, or system. Optimizes the relationship between the human and the system by integrating:
  - ✓ Human Factors
  - ✓ Manpower
  - ✓ Personnel
  - ✓ Training
  - ✓ Safety Factors
  - ✓ Medical Factors
  - ✓ Habitability Considerations
  - ✓ Personnel Survivability
  - ✓ Health Hazards
- Initiated by a requirement for system acquisition.
- Used throughout the acquisition process of a system or equipment, including post-delivery.
- Assumes a materiel solution. Focuses on the effective design, development & implementation of that solution.
- Ultimate goal is to improve total system performance and reduce life-cycle costs.
- Based on Systems Engineering Model. Uses rigorous design processes and data collection tools such as human performance modeling and standard engineering tools. Emphasizes spiral development and performance centered design
- Relies on human factors consultants, human engineers, logisticians, systems engineers, and contractors.

Human Performance Improvement (HPI)

- A systematic approach to identifying, assessing, and resolving performance issues. Can be applied at the individual, unit, and/or organization level, and it frequently determines that a number of problems exist. Specifically considers:
  - ✓ Manpower
  - ✓ Personnel
  - ✓ Training
  - ✓ Environmental Issues
  - ✓ Rewards & Incentives
  - ✓ IT
  - ✓ Knowledge Management
  - ✓ Material Solutions
  - ✓ Etc, Etc
- Initiated by a request to improve performance.
- Starts with a clearly defined business problem that is measured in terms of, cost, quality, quantity, and/or timeliness….and is open to all potential solutions.
- Will typically produce a "blended" solution
- Ultimate goal is to improve organizational effectiveness & efficiency by identifying and removing barriers to human performance.
- Follows the entire life cycle of a project from goal identification through mission analysis, performance analysis, root cause analysis, intervention selection, implementation, and evaluation.
- Relies on performance consultants, stakeholders, resource sponsors, performers, and intervention designers.

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A Few Final thoughts…

- Sea Warrior Job Task Analysis (JTAs) should provide the common linkage for work across the Navy
- Define and apply Science of Learning
- Need to understand the “white space” between HSI & HP
  - Develop KSATs
  - 5 Vector Model Development
  - NPS Curriculum
  - HP Lab

The HPC's Product is…

Improving Performance !