A View From the Bridge

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Commanding Officer

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– May 9, 2018 –
Taking a Fix on Our Alignment

Navy Strategy for Maritime Superiority

NAVSEA Key Vulnerabilities
Six tenets to achieve and maintain U.S. naval power:

- Bigger
- Better
- Networked
- More Talented
- More Agile
- More Ready

...Navy
NSWC Port Hueneme Strategic Initiatives

CNO
- Strengthen Naval Power At & From The Sea
- Achieve High Velocity Learning
- Strengthen Our Navy Team for the Future
- Expand And Strengthen our Network of Partners

ASN(RDA)
- Getting the Requirements Right
- Making Every Dollar Count
- Performing to Plan
- Minding a Healthy Industrial Base
- Strengthening Acquisition Workforce

COMNAVSEA
- On-Time Delivery of Ships from Availabilities
- Culture of Affordability
- Cyber Security

NSWC PHD
- Build Trust
- Human Capital Task Force
- Succeed in Procurement Surveillance Program
- Deliver useful SDTS on time
- Strategic Alignment
- Effective Leadership

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ISEA Traditional Role

The In-Service Engineering Agent (ISEA) is responsible for overall engineering, test, maintenance and logistics requirements in support of specific operational equipment.

Functions include:

- Design
- Safety
- Test Support
- Technical Documentation
- Data Analysis
- Maintenance Engineering
- Computer Programs
- Installation
- Fleet Support
- Training and Manning
- Integrated Logistics
- Data Management
- Configuration Management
- Test Equipment
- Supply Support
- Repair Facilities
ISEA of the Future Vision

Research, development and application of advanced technology enabling the ISEA of the future to optimize the lifecycle sustainment and iterative improvement of the ship, combat and weapons systems deployed to the Fleet.

- Predictive Analysis
- Augmented Reality
- Automation
- Data Analytics
- Deep Learning
- Artificial Intelligence
- Machine Learning
- Neural Networks
- Autonomy
- Unmanned Systems
- Data-Driven Decision Support
Artificial Intelligence brings a promise of true human-to-machine interaction. When machines become intelligent, they can understand requests, connect data points and draw conclusions. Machines can reason, observe and plan in order to present optimized solutions to human decision makers.

Software and hardware configuration will be tracked down to the level of individual chips and files, rather than servers and applications. Due to the improved data quality, the ISEA will have visibility of configuration at the system, platform, strike group, and fleet level.

Artificial Intelligence and highly sophisticated modeling and simulation will allow the ISEA to identify all potential issues related to ship modernization months and even years before a ship restricted availability.
Immersive Technologies

Immersive technologies like Augmented Reality and Virtual Reality will change how we create and experience content in the following ways:

1. Transitions the move from observation to immersion
2. Reduction of cost via virtual prototyping and remote technical support
3. Lowers the barrier to innovation and allows iterative experimentation
4. Provides a layer of authenticity of experience

In the future, the “iterative improvement” of platforms will take place in a fully immersive photo realistic “holo-deck like” environment where the ISEA will literally “walk the ship” to understand with rigorous detail all facets impacting the ship modernization process.
Automation and Autonomy

Autonomous systems and advances in robotics will allow machines to play a greater role in the sustainment and modernization of our ships. The biggest game changer will be intelligence and the ability of machines to learn from experience.

In the future, humans and robots will work collaboratively together to solve a variety of ISEA assignments, including:

- Inspections
- Repairs
- Technical assists
- Maintenance
- Hardware installations
- Test events
Way Forward

- Build a coalition of Government, Industry and Academic strategic partners with specific expertise in technology development and application

- Identify and build technology roadmaps and development plans for experimentation and prototyping

- Align and exploit internal research and development efforts to technology focus areas supporting ISEA
  - e.g. Advanced Naval Technology Experiment, 23 May 2018

Expand the Advantage and Culture of Affordability Precepts.
Invite Dramatic Change.
The Future is Now!
QUESTIONS?
Corporate Operations

Direct, manage and execute business related functions in support of the command mission

- Human Resources
- Equal Opportunity
- Infrastructure
- Safety
- Environmental Compliance
- Command Communications
- Information Technology and Cybersecurity
- Security
- Command Business Analysis
- Property Management

Programs/Sponsors

- NSWC PHD
  - Indirect
  - Direct (task basis)
Forthcoming Requirements

Command Professional Support Services
Award - Oct 2018, estimated value $49M
Incumbent: Vsolvit (CPSS) / QISI (MSS)

Command IT
Award - May 2019, estimated value $82M
POP 1 July 2019 – 30 Jun 2024, NAICS Code 541330
Incumbent: NDTI

Who to see at the LRAF Networking Table:
Mr. Dave Scheid, Mr. Mike Troxel, Mr. Erin Norris
Engineering and Test Office

Provide Rigorous Command-Wide Technical, Systems Engineering, Test & Evaluation Leadership, and Advocacy for current and future Fleet. Deliver efficient enterprise support to enhance Port Hueneme’s capability to support the Warfighter.

- Command Technical Rigor
- Command Competencies
  - System Engineering
  - Test and Evaluation
  - Afloat Cyber Security
- Fleet Effectiveness

Programs/sponsors

- Command Competencies
- PEO IWS 1, 7
- SEA 05
- COMPACFLT, RMC
Forthcoming Requirements

Engineering and Test Office Support  *(Not yet on LRAF)*
Current anticipated need/award date: August 2019
Estimated Value and Period of Performance: $47M for 5 Years
Current incumbent: QIS

Who to see at the LRAF Networking Table:
Mr. Arman Hovakemian, Mr. Alan Jaeger, Mr. Mark Jue
Drive Affordable Readiness through Product Support Excellence

Plan, provide, and innovate Product Support competencies, infrastructure, policies and processes that enable our customers to deliver and sustain safe, effective, and affordable surface warfare systems.

Digital Thread
Facilitating bi-directional traceability through an enterprise product model capability that provides a common data decision environment.

Affordable Readiness
Optimizing Operational Availability by exploiting the availability-cost curve to maximize weapon system readiness at the lowest lifecycle cost.

Fleet Effectiveness
Leveraging digital thread and affordable readiness to enable agile Mission-based Support and High Velocity Learning strategies.

Focus Areas
- Product Support
- Innovation and Change
- Enterprise Product Lifecycle Management
- Integrated Decision Environment (ePLM IDE)
- Model-based Product Support
- Predictive Analytics
- Fleet Engagement
- Mobile/Expeditionary Logistics

SPONSORS
- NAVSEA
- NAVAIR
- NAVSUP
- FLEET
- DLA
- PEOs

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Forthcoming Requirements

**S1000D Support** *(Not yet on LRAF)*
- Ongoing projects to define scope of technical data conversion and resource requirements; target completion September 2018
- Moving away from stand-alone/single use data and into a Product Lifecycle Management Framework

**ISEA of the Future** *(Not yet on LRAF)*
- Command strategic initiatives focused on defining requirements in the areas of predicative analytics, machine learning, augmented reality (AR) and virtual reality (VR)

**LOGIT Support** *(Not yet on LRAF)*
- Support of Navy’s Digital Logistics transformation in the areas of common enterprise infrastructure, data standards and governance, cybersecurity and mobile capabilities; requirements identification occurring in FY18

Who to see at the LRAF Networking Table:
Ms. Ashley Holloway and Mr. Mike Kinberg
Air Dominance Department

What We Do
• Combat System Life Cycle Support
• System Engineering
• Test and Evaluation
• Integrated Logistics Support
• Capabilities and Limitations
• Maintenance and Modernization
• In-Service Engineering
• Weapon System Installation/Integration
• Missile Development and Life Cycle Support
• Engineering Integration
• Test Support

Our Major Programs/Sponsors
• NAVSEA PEO IWS
• NAVSEA SEA 21
• Missile Defense Agency
Forthcoming Requirements

Common Processing System (CPS)
Current anticipated need/award date: 2019 Q2, Estimated Value: $100M - $250M
Period of Performance: May 2019 - May 2024, NAICS Code: 334111
Current incumbent: New Procurement

UYQ-70 IDIQ
Current anticipated need/award date: 2020, Estimated Value: $25M - $50M
Period of Performance: May 2020 - May 2025, NAICS Code: 334419
Current incumbent: DRS Laurel Technologies

Common Display System (CDS)
Current anticipated need/award date: 2020, Estimated Value: $5M - $25M
Period of Performance: May 2020 - May 2025, NAICS Code: 334118
Current incumbent: New Procurement

Advanced Radar and Weapon Systems
Current anticipated need/award date: 2019, Estimated Value: $25M - $50M
Period of Performance: Jan 2019 – Jan 2024, NAICS Code: 541330
Current incumbent: New Procurement

Who to see at the LRAF Networking Table:
Mr. James Watkins
Littoral and Strike Warfare Department

Mission Statement: We provide Full-Spectrum ISEA in support of Surface Combat & Weapon System Elements, including:

- Test and Evaluation
- Systems Engineering & Analysis
- Integrated Logistics
- Fleet Technical Services
- Post Delivery/Production Support & Lifecycle Sustainment

Programs/Sponsors:

- Tomahawk – PMS 280/281
- LCS – PMS 510/515/420/IWS8.0
- MK160 GFCS/NFCS – IWS3C
- DDG1000 – PMS 500/IWS9.0
- Harpoon – PMS 208
- NSC/OPC - US Coast Guard
- FFGT(X) – PMS 515
- MMSC – PMS 525
- OTH – IWS3H

Personnel:

- Civilian: 540
- Military: 15
- Contractors: 110
Forthcoming Requirements

Logistics Support Services
Anticipated award date: 01 FEB 2019
Estimated Value: $45M
Period of Performance: 5-Year Task Order (One Base Year + Four 1-Year Options)
NAICS Code: 541330
Current Incumbent: AdvantEdge Technology

Tomahawk Weapon Control System Manufacturing
Anticipated award date: 31 MAY 2019
Estimated Value: $24M
Period of Performance: 5-Year Contract (One Base Year + Four 1-Year Options)
NAICS Code: 334511
Current Incumbent: ACE Electronics

Tomahawk Training Support Activity
Anticipated award date: 01 SEP 2020
Estimated Value: $40M
Period of Performance: 5-Year Task Order (One Base Year + Four 1-Year Options)
NAICS Code: 541330
Current Incumbent: Southern Computer Consultants, Inc.

Who to see at the LRAF Networking Table:
Ms. Sandra Aguilar and Mr. Robert Howard
Ship Defense & Expeditionary Warfare Department

- In-Service Engineering Agent (ISEA)
- Integrated Product Support
- Test and Evaluation
- Combat Systems Installation
- Combat Systems Software Support
- Underway Replenishment
- Combat Systems Ship Testing (CSSQT) Support
- Technical Manual Support

Major Programs/Sponsors
- SSDS / PEO IWS 10
- Radars / PEO IWS 2
- NSSMS, RAM, CIWS / PEO IWS 10, 11 & 12
- Carrier & L Class / PEO SHIPS, CNAP & CNAL
- UNREP / MSC, PMS 385
- Switchboards / SEA 05H
- Directed Energy / ONR, PEO IWS 2
- Caps & Lims / NAVIFOR, SEA 05H
Forthcoming Requirements

**Carrier / L Class In-Service Engineering**
Need date: 19 May 2021  
$98M   POP: 19 May 2021 - 18 May 2026   NAICS = 541330  
Incumbent: INDUS

**Alteration Installation Team (AIT)**
Need date: 19 Jun 2021  
$225M   POP: 19 Jun 2021 - 18 Jun 2026   NAICS = 541330  
Incumbent: PRISM

**E-STREAM Underway Replenishment**
Need date: 20 Dec 2021  
$49M   POP: 20 Dec 2021 – 19 Dec 2026   NAICS = 541330  
Incumbent: Gryphon Technologies, Inc.

Who to see at the LRAF Networking Table:
Ms. Lorri Herr, Mr. Joe Buenrostro, Mr. Ken Guinto and Mr. Ryan Burnett
Land and Sea Test Department

Onsite manager for the Navy’s Self Defense Test Ship

Operation and maintenance of the Test Ship Remote Control Network

Ships:

1994-2003: DECATUR (EDD-31)

2005-Present: PAUL F. FOSTER (EDD-964)

Sponsor: PEO IWS 1T

Onsite manager for NSWC PHD White Sands Missile Range Detachment

Provides short, medium, and long range sub-orbital vehicles and associated services to meet the needs of various programs, including: Aegis BMD, AMDR, Maritime Missile Defense, etc.

Sponsors: PEO IWS, MDA, and others
Forthcoming Requirements

Planned Award Date: 9/30/2019
Estimated Value: $48M, Period of Performance FY2019-2023
NAICS Code: 488390
Current incumbent: AdvantEdge Technology, Inc.

TSRCN Engineering Support Contract
Planned Award Date: 5/1/2020
Estimated Value: $20M, Period of Performance: FY2020-2025
NAICS Code: 541330
Current incumbent: AdvantEdge Technology, Inc.

Who to see at the table:
Mr. Roger Yoshida and Ms. Lindsay Fox
Forthcoming Requirements

Short/Medium Range Sub-Orbital Vehicles
Planned Award Date: 2/21/2019
Estimated Value: $230M, Period of Performance FY2019-2023
NAICS Code: 336414
Current incumbent: Various
(Contracting at NSWC Dahlgren)

Long Range Sub-Orbital Vehicles (Not yet on LRAF)
Planned Award Date: TBD
Estimated Value: $470M, Period of Performance FY2019-2023
NAICS Code: 336414
Current incumbent: Various
(Contracting at NSWC PHD)

Who to see at the table:
Mr. Roger Yoshida and Ms. Lindsay Fox