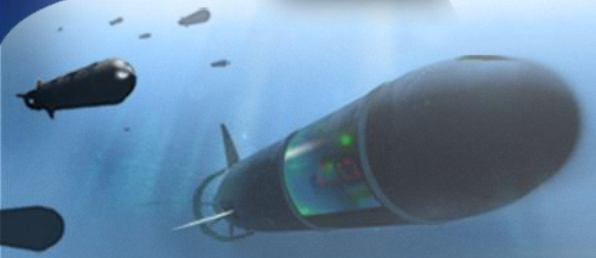
CALL TO ARMS STRATEGY



NUWC Division, Keyport Focus Areas

FOUR PILLARS

P1 – Deliver Weapons to the Fleet

- Heavyweight MK48 Torpedoes, in quantity
- Test & Evaluation and In-service Support for new variants and modifications/capabilities
- Support foreign military partners

P2 – Increase Platform (Submarines, UUVs, Ships, Aircraft) Operational Availability (Ao)

- Sustainment: Getting submarines underway, providing the right parts when needed
- Technologies: Deliver appropriate and effective tools to shipyards to speed overhauls
- Obsolescence management, Reverse Engineering

P3 – Speed Development of Seabed and Subsea Warfare

- Focus on making UUV and Undersea Warfare Systems operationally relevant
- Deliver capability soonest with industry, fleet (UUVRON1, NSWG8, COCOMs), academic partnerships
- Anti-Submarine Warfare and surveillance systems development and In-Service Support

P4 – Ensure Cyber-physical systems are secure and resilient

- Cybersystems analysis and hardening
- Full-spectrum supply-chain protection in hardware, firmware, software
- Insertion of DEVSECOPS topologies to “bake-in” USW systems security

HISTORY AND FUTURE

Mission:

To provide advanced technical capabilities for Test and Evaluation, In-Service Engineering, Maintenance and Industrial Base Support, Fleet Material Readiness, and Obsolescence Management for Undersea Warfare; and to execute other responsibilities as assigned by the Commander, Naval Undersea Warfare Centers. (New mission statement under revision)

Vision:

We accelerate emerging and disruptive technology to the warfighter through innovation to expand America's undersea dominance.

History:

1914 –1930
Pacific Coast Torpedo Station

Torpedo Repair
Torpedo Ranging and Testing
Torpedo School

1930-1978
Naval Torpedo Station

Major Center of Torpedo Production and Testing WWII

Torpedoes Used by Submarines, Aircraft, and Surface Ships

1944
First Acoustic Testing Range

1956
First 3D Range

Tracking on Multiple Ranges

Improved Recovery Techniques

Growth of Test and Evaluation Functions

1978–1991
Naval Undersea Warfare Engineering Station

1992
Became Naval Undersea Warfare Center

Test and Evaluation
Engineering and Fleet Support
Autonomous Underwater Systems
Custom Engineered Solutions

1992-Present
Naval Undersea Warfare Center Division, Keyport

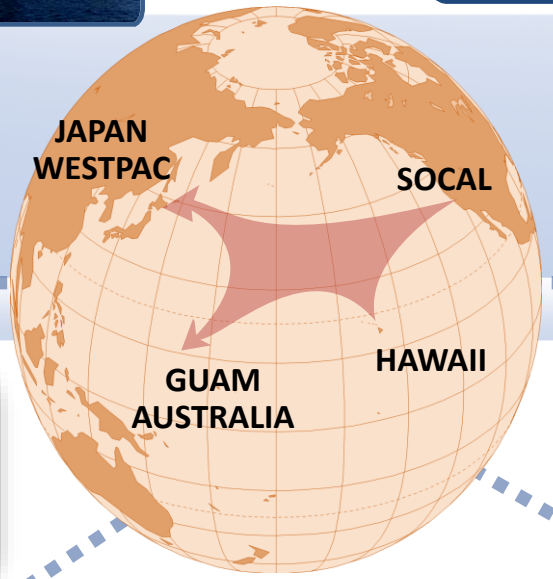
DETACHMENTS, WHAT WE DO

Anyplace, Anytime T&E(PAC, LANT, Worldwide)

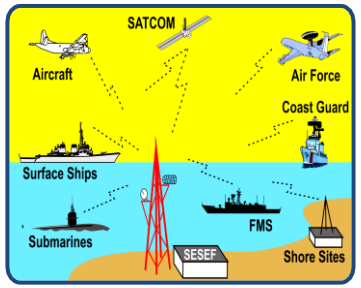
- CSSQT (US & FMS)
- USW Combat Systems, Weapons & Sensors
- COMOPTEVFOR Trusted Agent
- Training & Exercise Operations Planning & Coordination
- Developmental Testing/Shipboard Support

Exercise Reconstruction, Analysis & Assessment

- Air PACER
- Surface Force Training, Proficiency & Certification Events
- Submarine SCORES, SCC & TACDEVEX Support
- VISTA Debrief & USW Tools
- Live, Virtual, & Constructive (LVC) Solutions



Range Operations & Support



- MK 30 Mobile U/W Targets (HI, Guam)
- U/W Tracking Instrumentation
- FTEC – MDA Support Link/RCS
- SESEF – EW/Comm
- SSRNM
- MSF Measure & Deperm

USW Weapons

- MK 48 Torpedo IMA
- Guam Technical Support
- Contract Oversight

Submarine C5I,NPES,ISE & Modernization Support

- ISE Support Hawaii, Guam, SOCAL & WESTPAC
- Periscope, Sonar, Radio Room, EW, Combat Systems
- Modernization/AIT Support
- IT/IA Support
- VLS PSE Maintenance

TECHNICAL INNOVATION

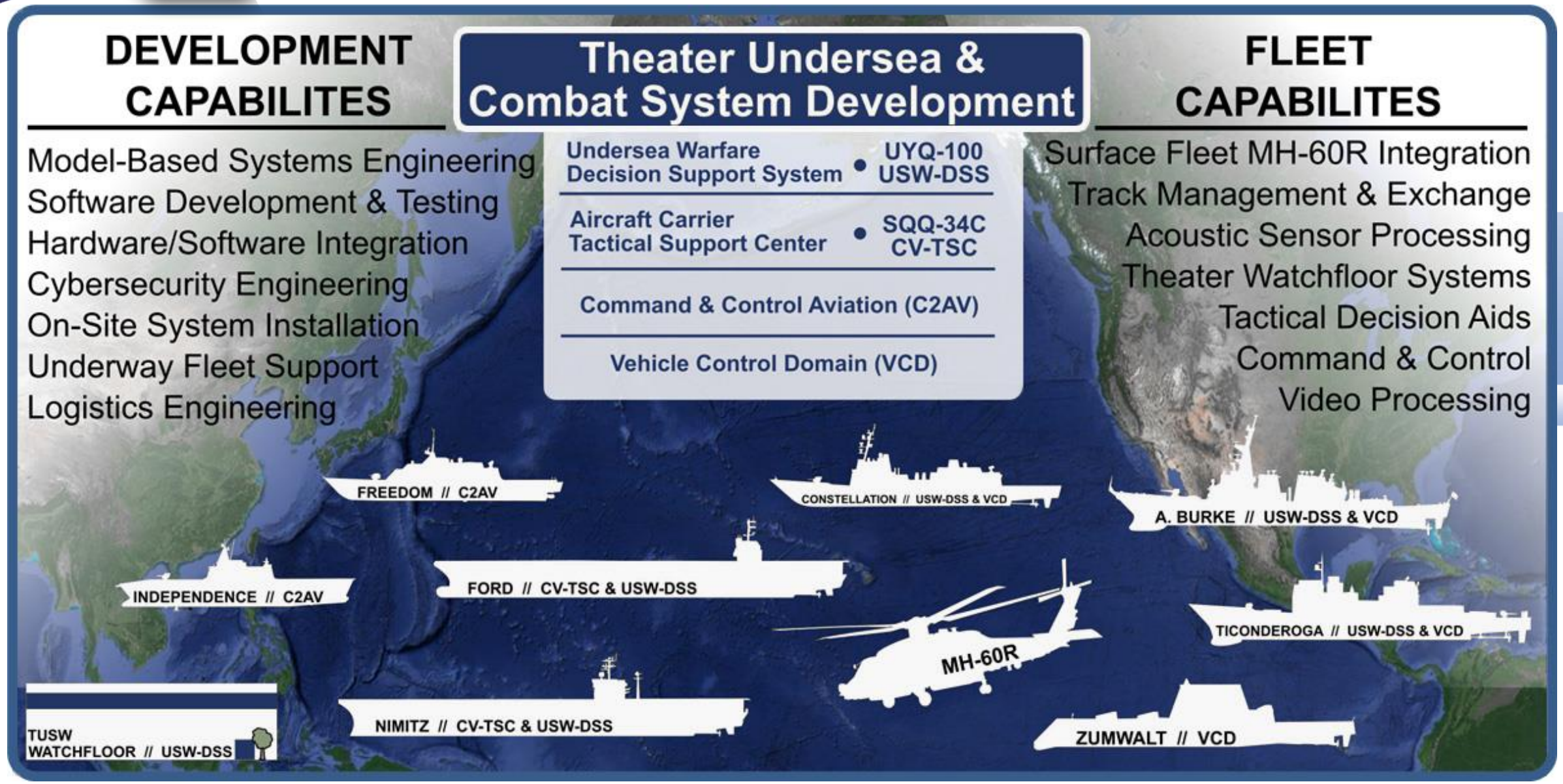
Augmented and Virtual Reality
The implementation of augmented and virtual reality technologies can revolutionize the way we perform many existing evolutions such as: training, performance support, mission rehearsal, maintenance rehearsal, and system design.

Data Sciences
Adopt and develop data analytics best practices across an integrated suite of In-Service Engineering decision-making tools and processes by 2024 that will transform warfighter readiness and capability.

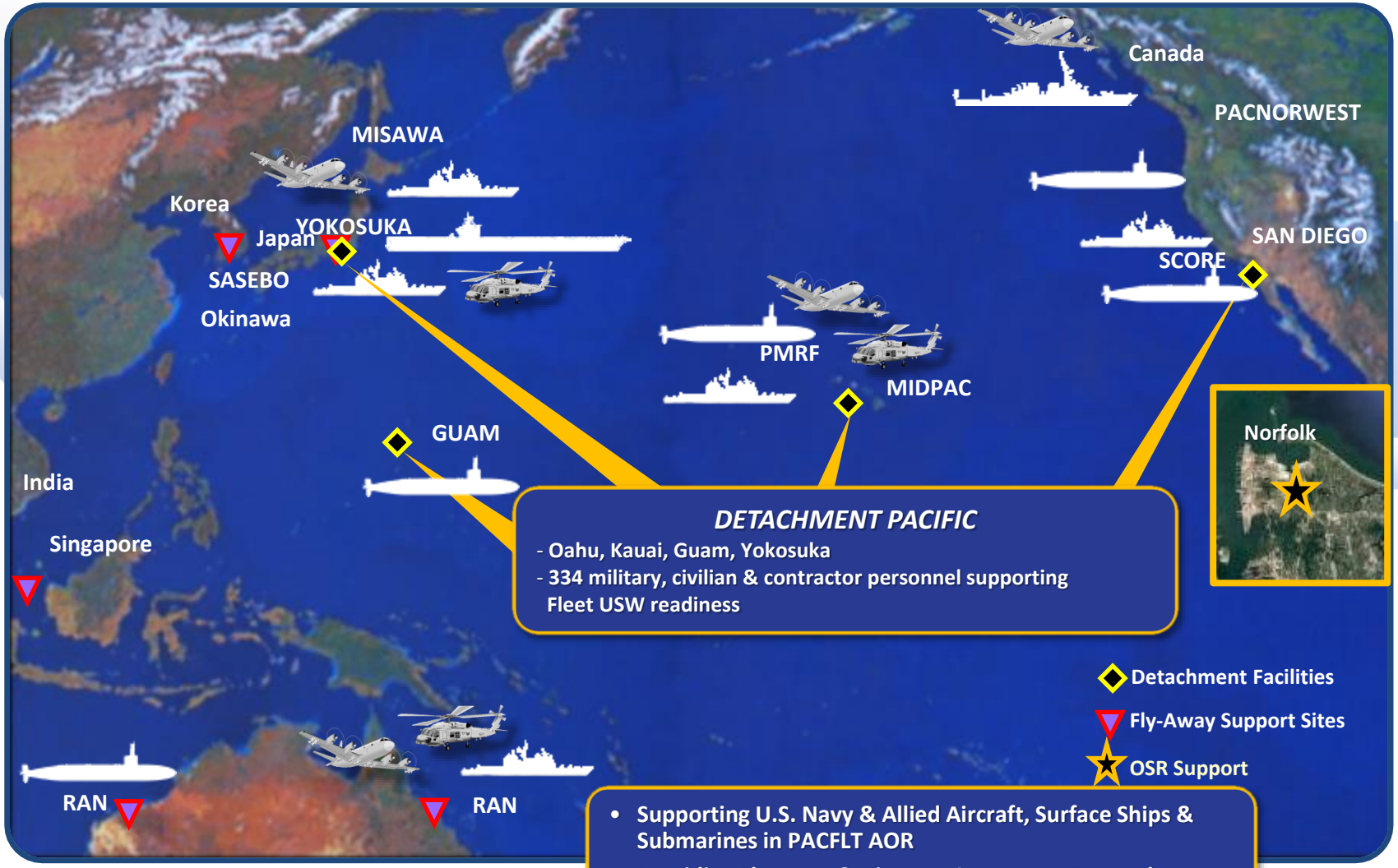
Cybersecurity
Cyber immunity and cyber hygiene are key pillars in the face of insider and supply chain threats. Traditional compliance based security is important but no longer enough to meet an ever-evolving threat.

Sensor Aggregation
Provide sailors using command and control and combat systems information necessary for threat assessment based on the platform and weapons characteristics of target platforms using threat data. Provide an independent, portable system to process sonobuoy data and support analysis in identifying, classifying, and localizing acoustic contacts based on proven government-owned technologies.

THEATER USW SYSTEMS



DETACHMENTS, WHERE WE ARE



- Supporting U.S. Navy & Allied Aircraft, Surface Ships & Submarines in PACFLT AOR
- Providing Fly Away & Distance Support to Forward Deployed Naval Forces
- Performing Joint & MDA Risk Mitigation Testing

DETACHMENT FACILITIES - OAHU

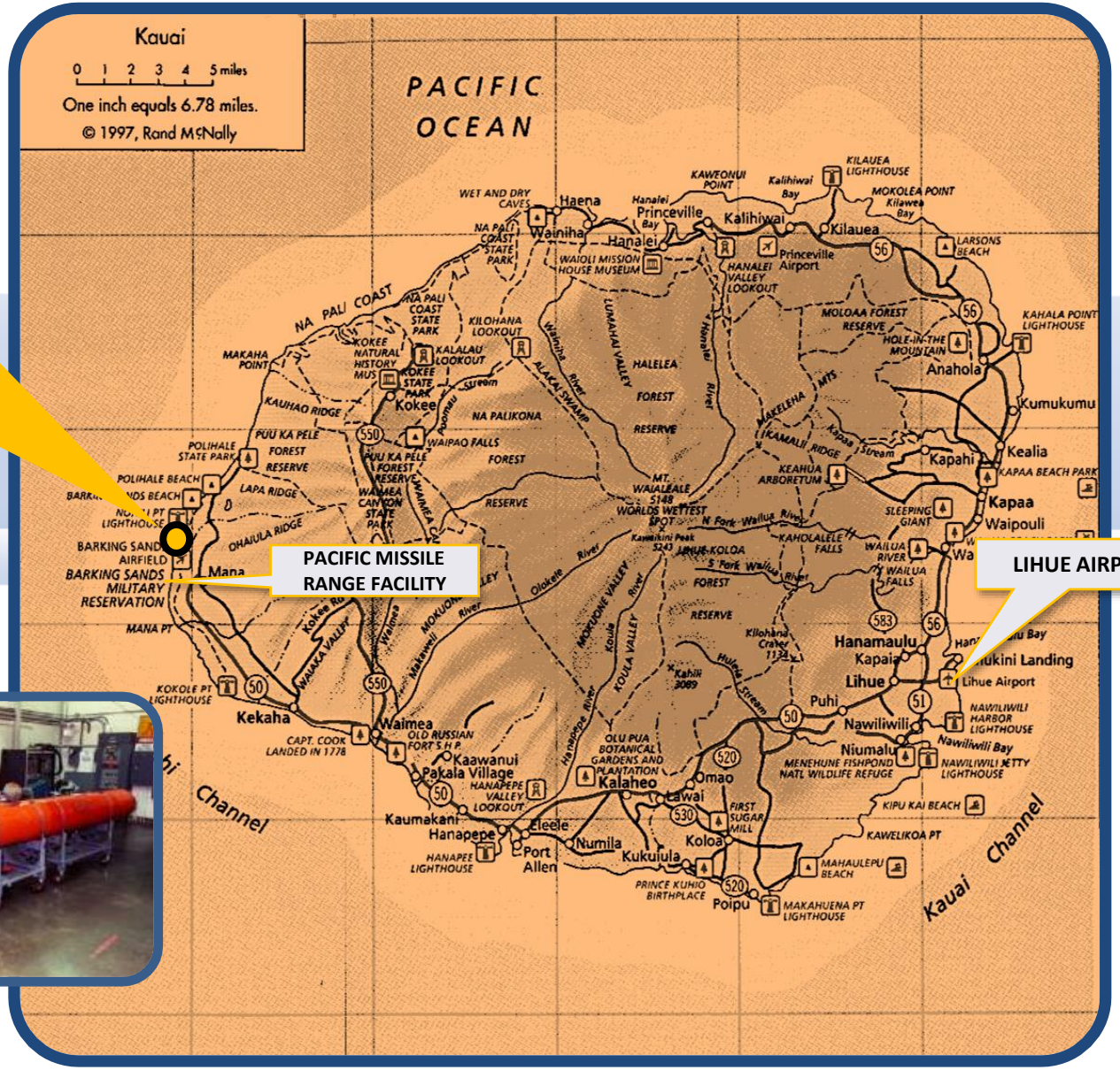
Magnetic Silencing Deperm Facility
(Beckoning Point, PH)

Fleet Test & Evaluation Center
(FTEC - Kapolei)

Shipboard Electronic Systems Evaluation Facility (SESEF)
Tactical Network Analysis Center (TNAC)
Surface Ship Radiated Noise Monitoring (SSRNM)

DETACHMENT FACILITIES - KAUAI

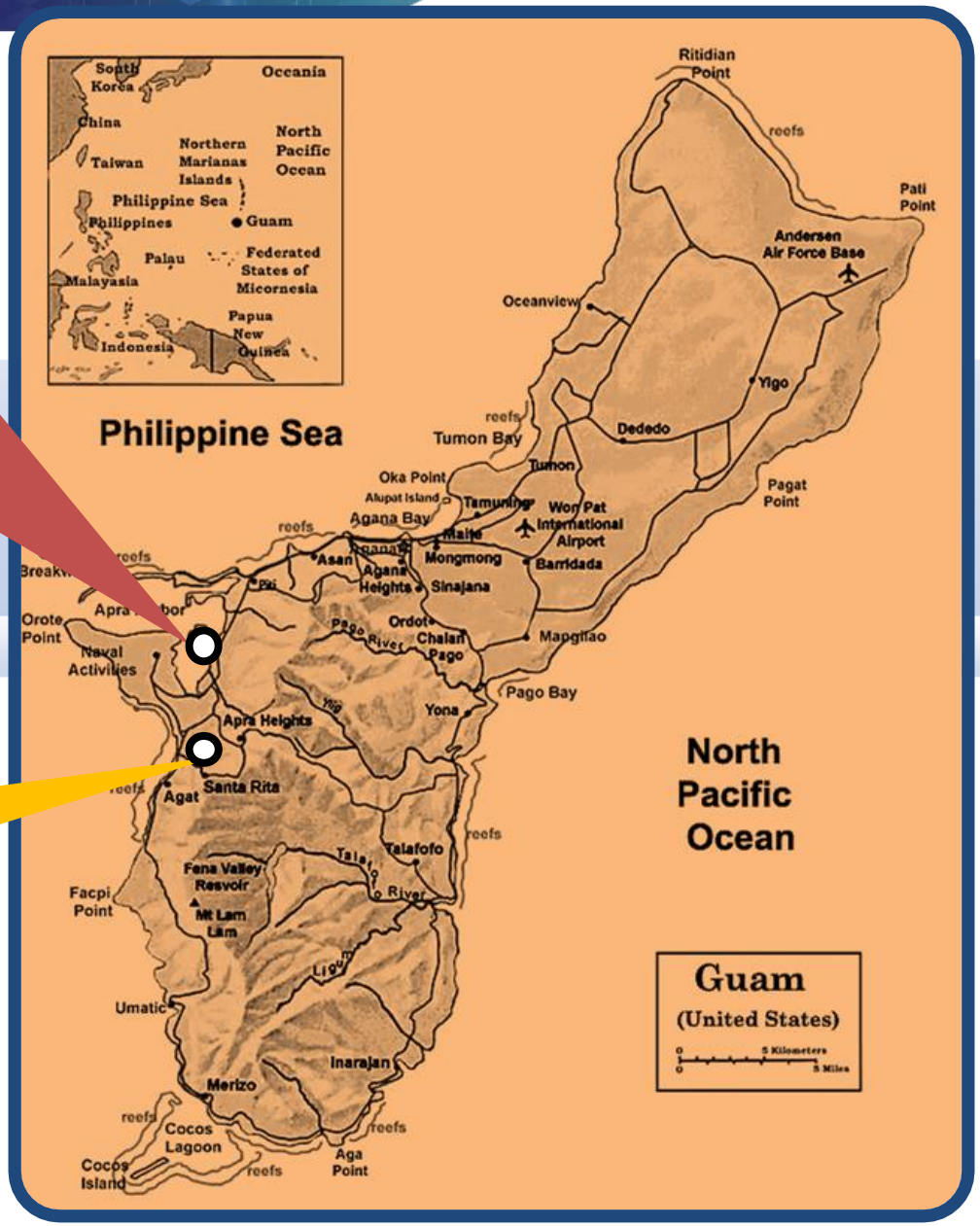
MK 30 Target Operational Site Located on PMRF



DETACHMENT FACILITIES - GUAM

Torpedo Exercise Support Facility

•Shipboard Electronic Systems Evaluation Facility (SESEF)



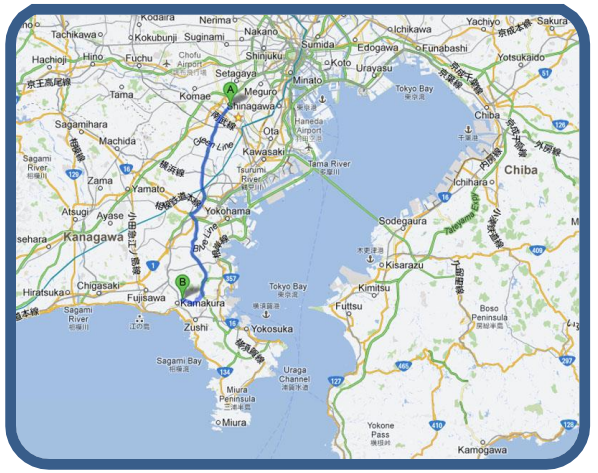
DETACHMENT SITES - OTHER

COMSUBRON ELEVEN, Point Loma, CA

- In-Service Engineer Site Reps
  - Periscope (2)
  - SUBLAN/Network
- Sub Modernization Coordinator

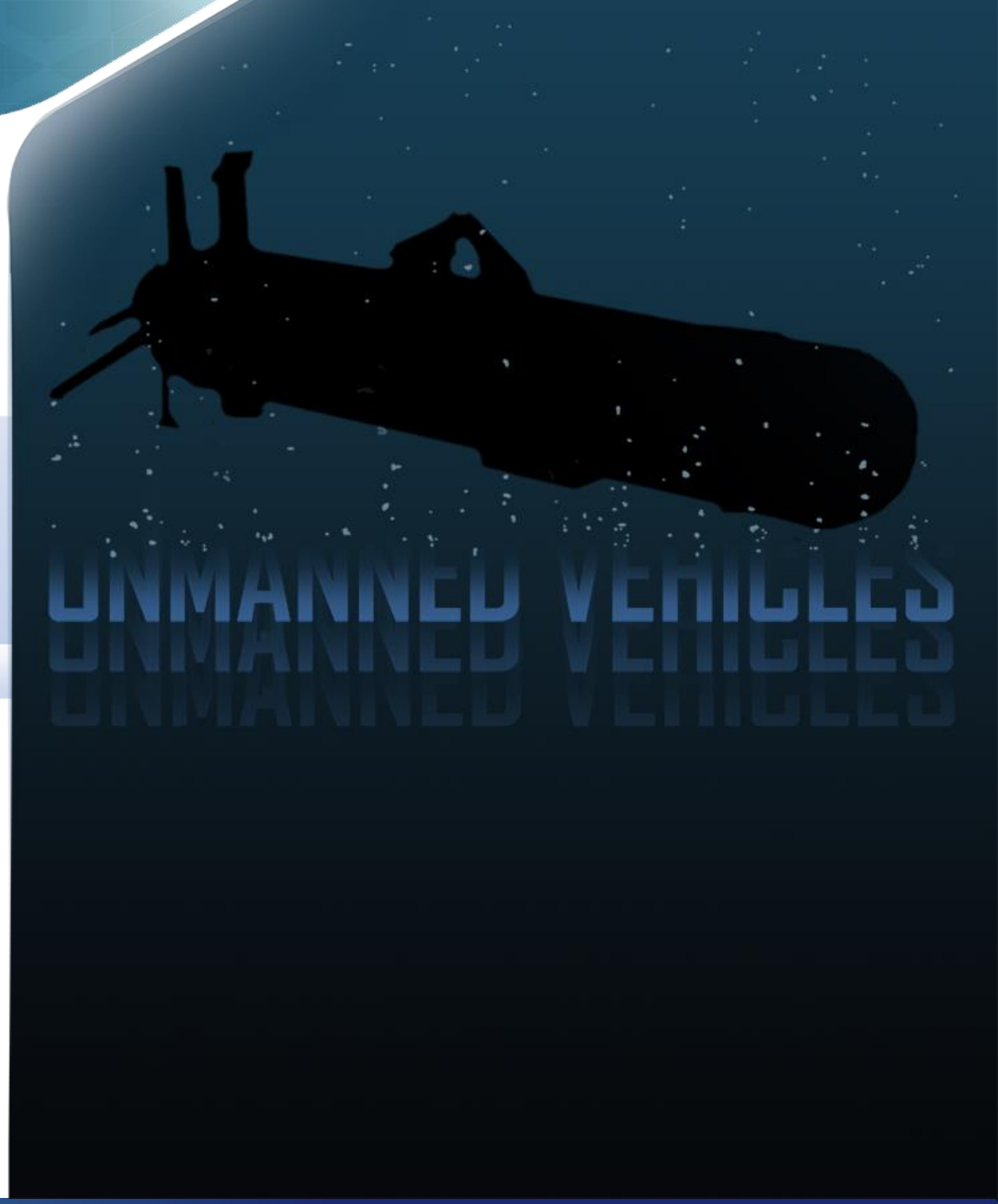
COMDESRON FIFTEEN, Yokosuka

- CDS15 On-Site Rep
- ATG Contractor Rep
- Yokohama Office



UNMANNED VEHICLES & PAYLOADS

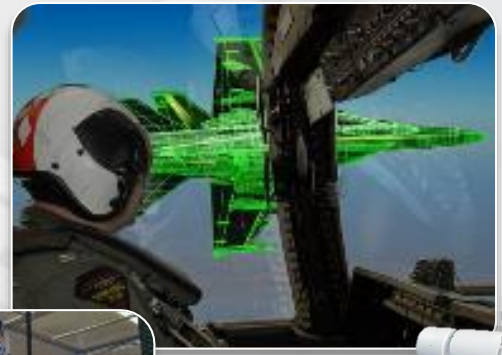
Programs Supported:



DETACHMENT TAKEAWAYS

- NUWC Keyport Detachment Pacific…
- NUWC's Forward Presence in the Pacific
- Delivering NUWC Support required by the Fleet on the Waterfront at the "Tip of Spear" in Pacific Fleet Homeports
- Leveraging our Reachback Capability to NSWC-NUWC Warfare Centers to Deliver Cost-Effective Support to the Fleet
- Narrowing the seams between the Navy's Engineering, Acquisition, R&D communities, and the Warfighter

NAVAL RESEARCH ENTERPRISE (NRE)



ONR HQ

NRL

ONR Global

>1,000 Partners

NW Tech Bridge: DON Annual Market Opportunity

Guided access to a large, stable market

NAVY

- $120 Billion Annual Budget
- 400+% Increase in OTA Utilization
- Focused on accelerated acquisition processes

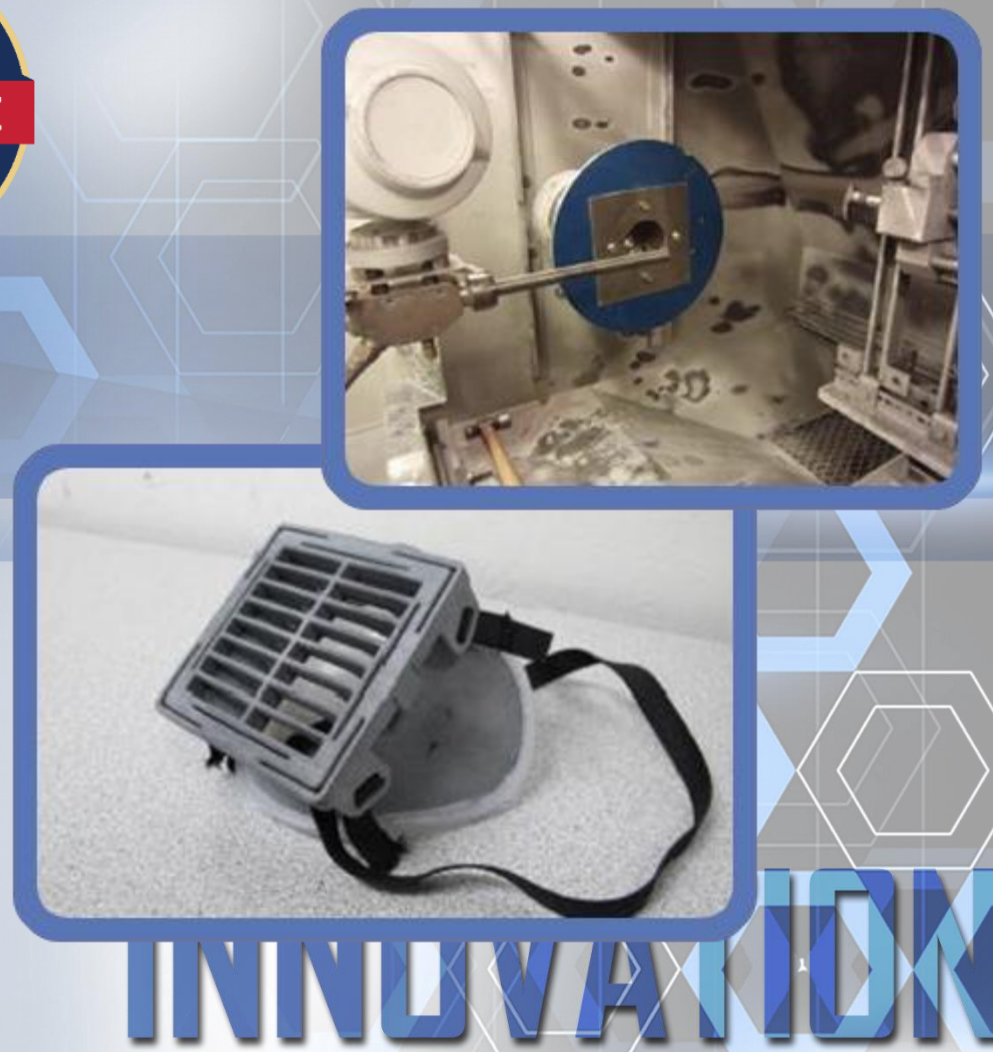
NAVSEA

- $35 Billion Annual Budget
- Est. 30% of Navy Budget
- $3 Billion Annual Small Business Receipts

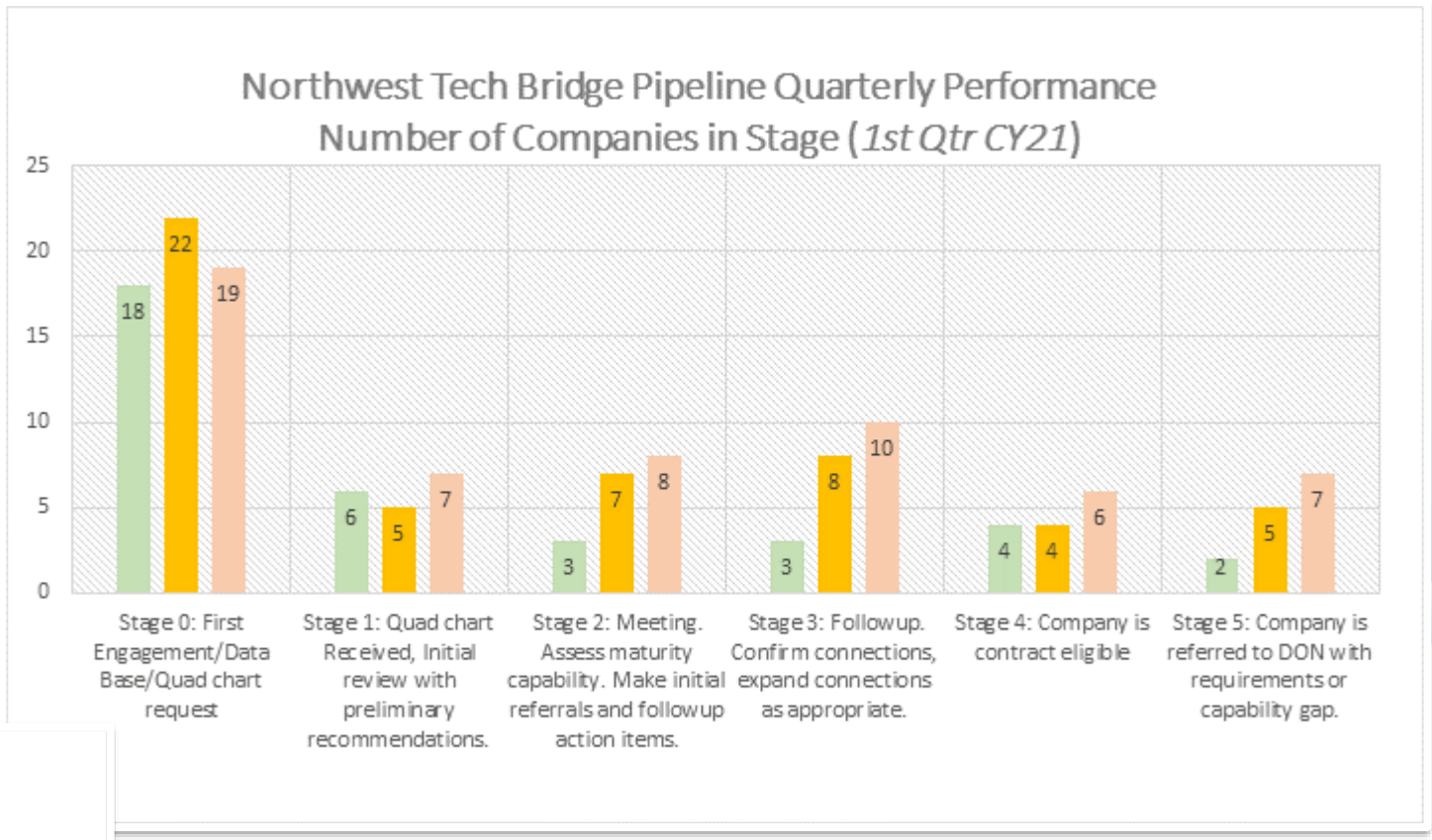
$198 Million per year to Washington Small Businesses (6.6%)

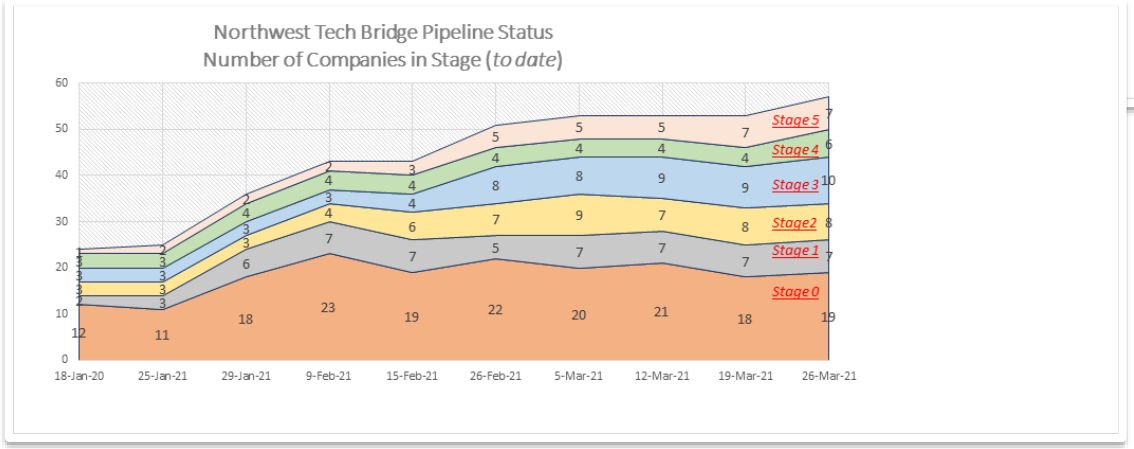
TECHNICAL INNOVATION

- **Patents**
  - Patent-sourcing workshops
  - 49 patents in FY20
- **Pedigree**
  - Growing pool of Science and Engineers with PhDs
  - Key roles on NAVSEA / Navy wide technology initiatives
- **Technology transfer**
  - Northwest Tech Bridge
  - Local / regional / national relationships with industry, national labs and academia
  - Patent Council / Office of Research and Technology Application
  - Relationships with Manufacturing Extension Programs and TechLink



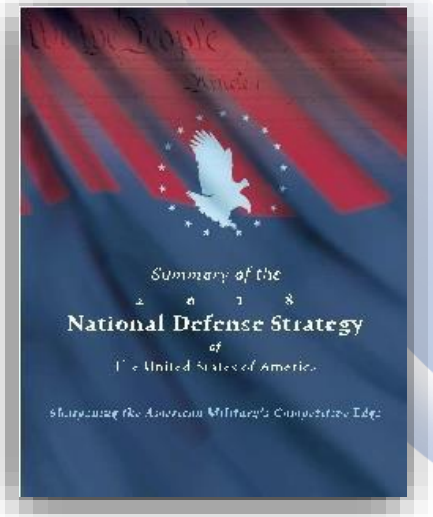
TECH BRIDGE MISSION AND NETWORK





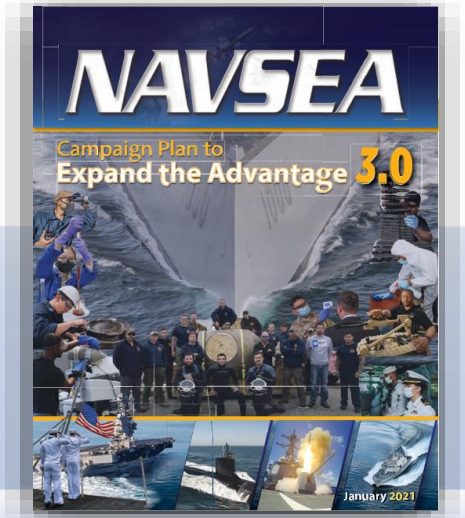
Outreach

STRATEGIC ALIGNMENT



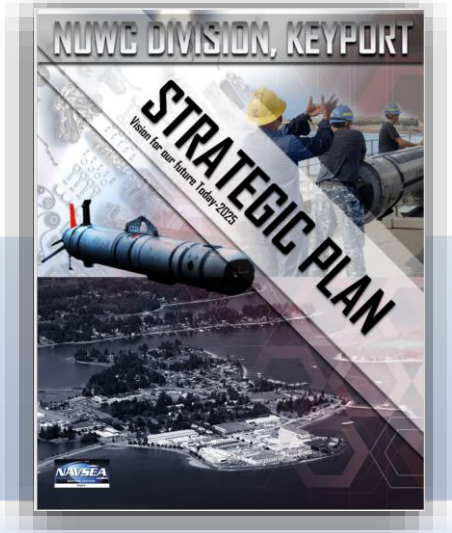
CNO NAVPLAN

- Readiness: Deliver a more ready Fleet.
- Capabilities: Deliver a more lethal, better connected Fleet
- Capcapacity: Deliver a larger, hybrid fleet.



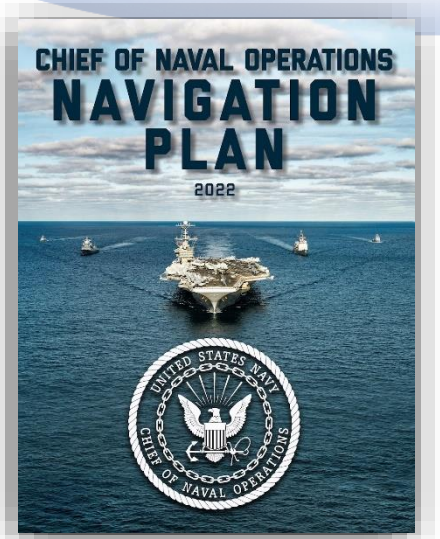
WARFARE CENTERS STRATEGIC PLAN

- Empowered workforce
- Technical and business excellence
- Enhanced partnerships
- Relevant innovation



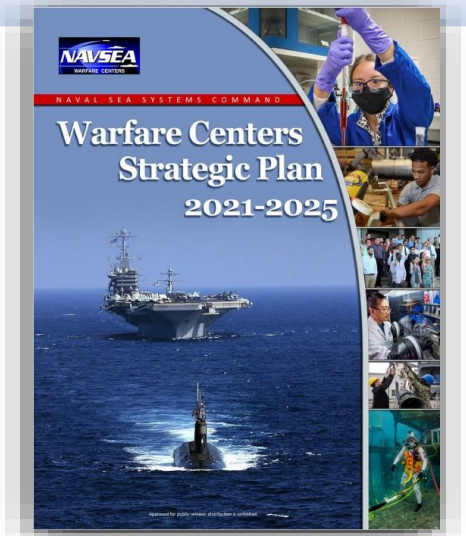
NATIONAL DEFENSE STRATEGY

- Build a More Lethal Force
- Strengthen Alliances and Attract New Partners
- Reform the Department for Greater Performance and Affordability



NAVSEA CAMPAIGN PLAN 3.0

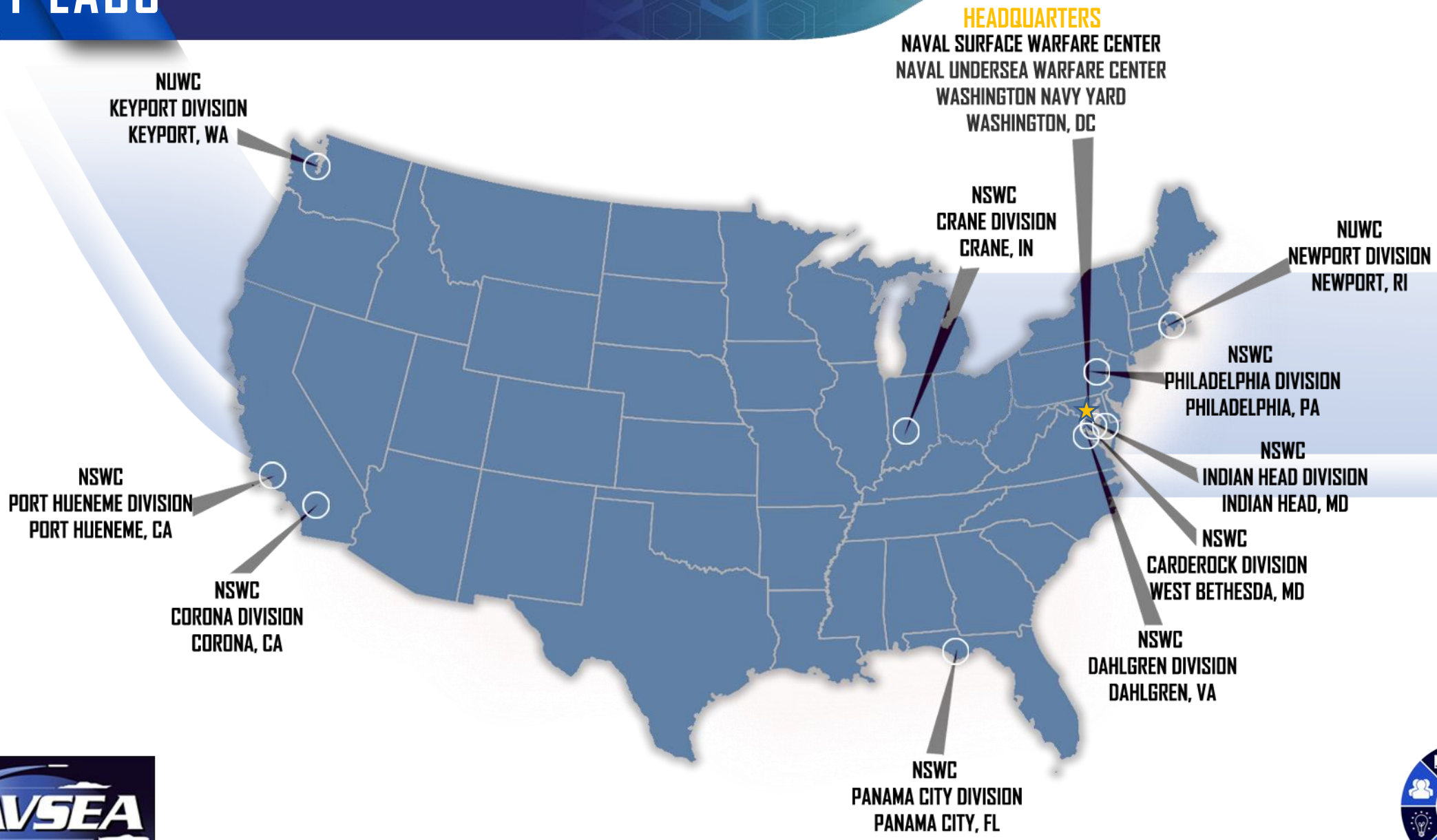
- Deliver Combat Power: On-time Delivery of Combat-Ready Ships, Submarines, and Systems
- Transform Digital Capability
- Build a Team to Compete and Win



NUWC KEYPORT STRATEGIC PLAN

- Transform our People and Processes
- Transform our Products and Services
- Transform our Infrastructure

NAVY LABS



NAVSEA WARFARE CENTERS Keyport

NAVSEA WARFARE CENTERS one TEAM

COMMAND LEADERSHIP

COMMANDING OFFICER
CAPT Clint Hoskins, USN 00

TECHNICAL DIRECTOR
Mike Slater, SSTM
TD

COMMAND STAFF

DEPUTY TECHNICAL DIRECTOR
Bill Carlson
TDB

DEPUTY BUSINESS DIRECTOR
Sarah Magee
0BD

CHIEF OF STAFF
Gina Regynski
TD

EXECUTIVE OFFICER
LCDR Christopher Pace
XO

SENIOR ENLISTED LEADER
NDCM Jericho Diego
SEL

BUSINESS DEPARTMENTS

COMPTROLLER
John Williams
01

CONTRACTS
Carrie Lawson
02

CORPORATE OPERATIONS
Angela Hocutt
10

TECHNICAL DEPARTMENTS

TEST & EVALUATION
Troy Kelley
20

UNDERSEA WEAPONS
Jim Bleich, SSTM
30

UNDERSEA SYSTEMS & SUSTAINMENT ENGINEERING
David Coleman
40

UNMANNED & THEATER USW SYSTEMS
John Kenney
50

CUSTOMER ADVOCACY
Scott Shimizu
70

NAVAL SEA LOGISTICS CENTER

COMMANDING OFFICER
CAPT Damian Clem, USN
00

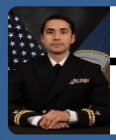
SENIOR CIVILIAN
Beth Warner
TD

PACIFIC DETACHMENT

OFFICER IN CHARGE
LCDR James Barclay, USN
OIC

DIRECTOR
Chuck Minnich
TDC

SAN DIEGO DETACHMENT



OFFICER IN CHARGE
LT Cesar Segura, USN
OIC

SITE DIRECTOR
Ken Dorren
54

* As of 10 Apr 23