Welcome

to the Tidewater Association of Service Contractors

NavalX Mid-Atlantic Tech Bridge

06 May 2021

Mid Atlantic Tech Bridge (MATB) Industry Day
Hosted by Tidewater Area Service Contractors (TASC)
6 May 2021

1500-1505	Opening Remarks	Jeff Brunner (TASC)
1505-1510	Industry Day Overview	Dr. Julie Stark
1510-1530	Second Fleet	VADM Andrew Lewis
1530-1550	MATB	CDR Bobby Hanvey
1550-1610	NSWC Dahlgren	CAPT (Sel.) Michael Aiena, Mr. Barry Stevens
1610-1630	NSWC Carderock	Mr. Larry Tarasek, Dr. David Drazen
1630-1650	NIWC Atlantic	Dr. Suzanne Huerth
1650-1700	757 Accelerate	Ms. Evans McMillion
1700-1710	Gangplank, VA	Mr. Jason Lamb
1710-1730	Q & A	Questions & discussion moderated by Dr. Stark

More information about the MATB and all Commands is available at the following URL:

Mid Atlantic Tech Bridge: https://www.secnav.navy.mil/agility/Pages/techbridges.aspx

TASC Overview

- Focal point for industry collaboration toward greater awareness of Government business opportunities while sharing industry's experience and perspective with Government partners to more clearly define, understand, and improve the acquisition process to optimize support to the warfighter and Federal agencies, as well as stewardship to the taxpayer.
- Industry Member:

  Value through access to government decision makers and forecasted opportunities by facilitating various industry day, education and networking events.
- Government Member:

  Value through access to industry feedback, a conduit for market research participation, education, and networking events.

VICE ADMIRAL ANDREW LEWIS
Commander, Second Fleet
Commander, Joint Forces Command Norfolk

Tech Bridge Overview

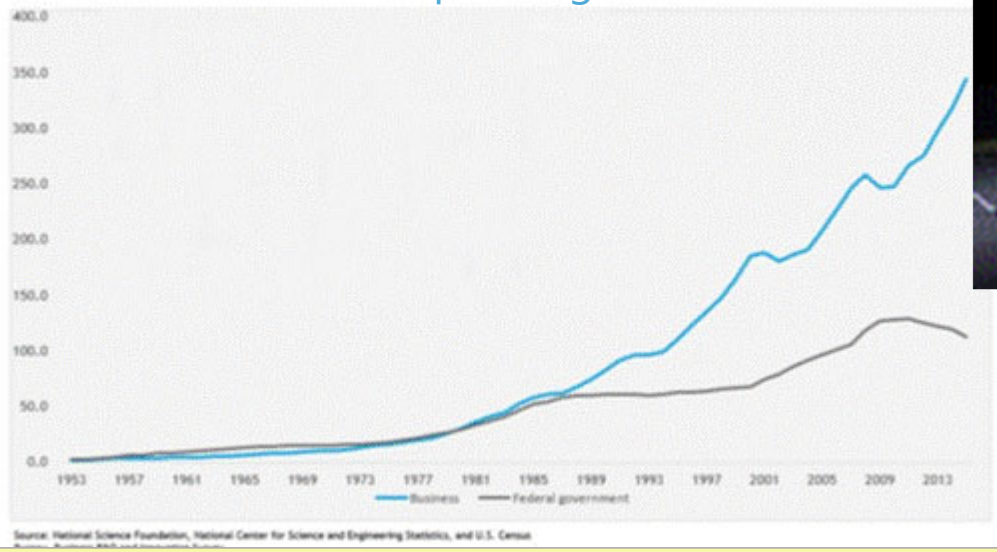
PRESENTED BY:

CDR Bobby ‘snocone’ Hanvey
Exec. Director Mid-Atlantic Tech Bridge

Why NavalX?

DoD No Longer Drives the Nation's Innovation Ecosystem

R&D Spending

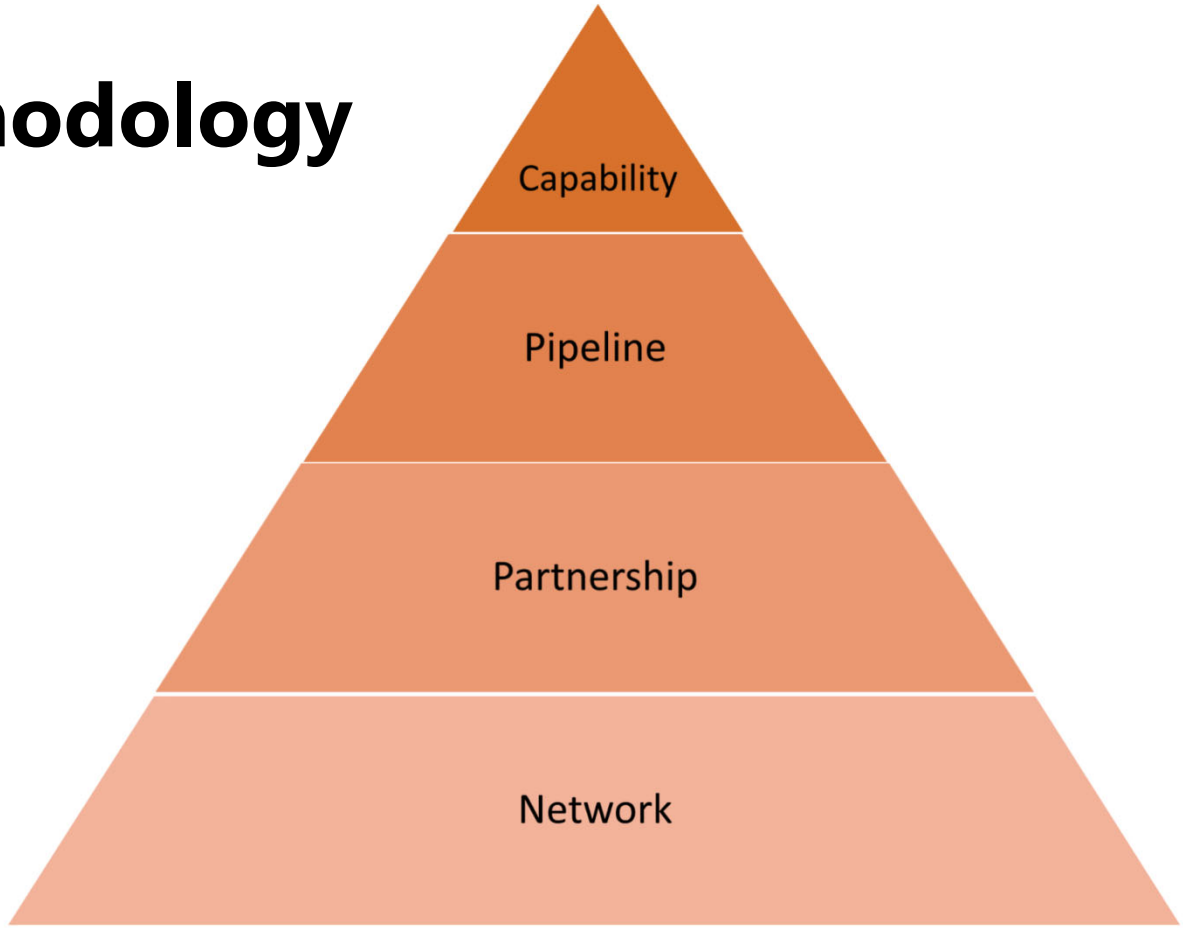


The Department of the Navy is not keeping pace with rapidly changing needs and technologies, eroding our ability to create and sustain battlespace advantages.

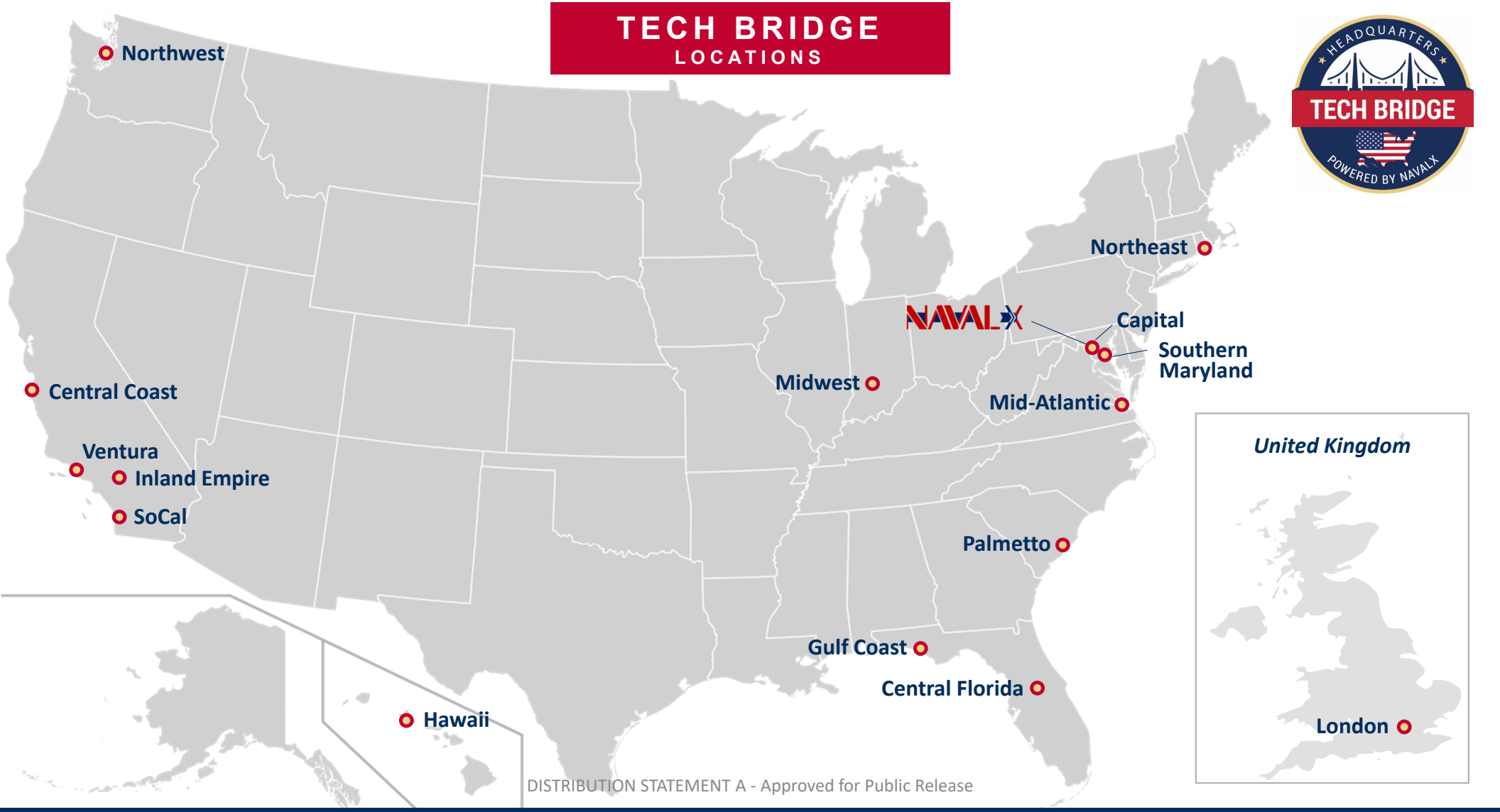
Mission

1. **Guide naval stakeholders** to rapidly deliver capabilities to the warfighter.
2. Serve as the **platform that connects** Naval needs and challenges with expert solution providers across industry, academia, and DoD.
3. **Encourage and foster culture change** across the DoN to make the USN a more agile, learning, and adaptable organization.

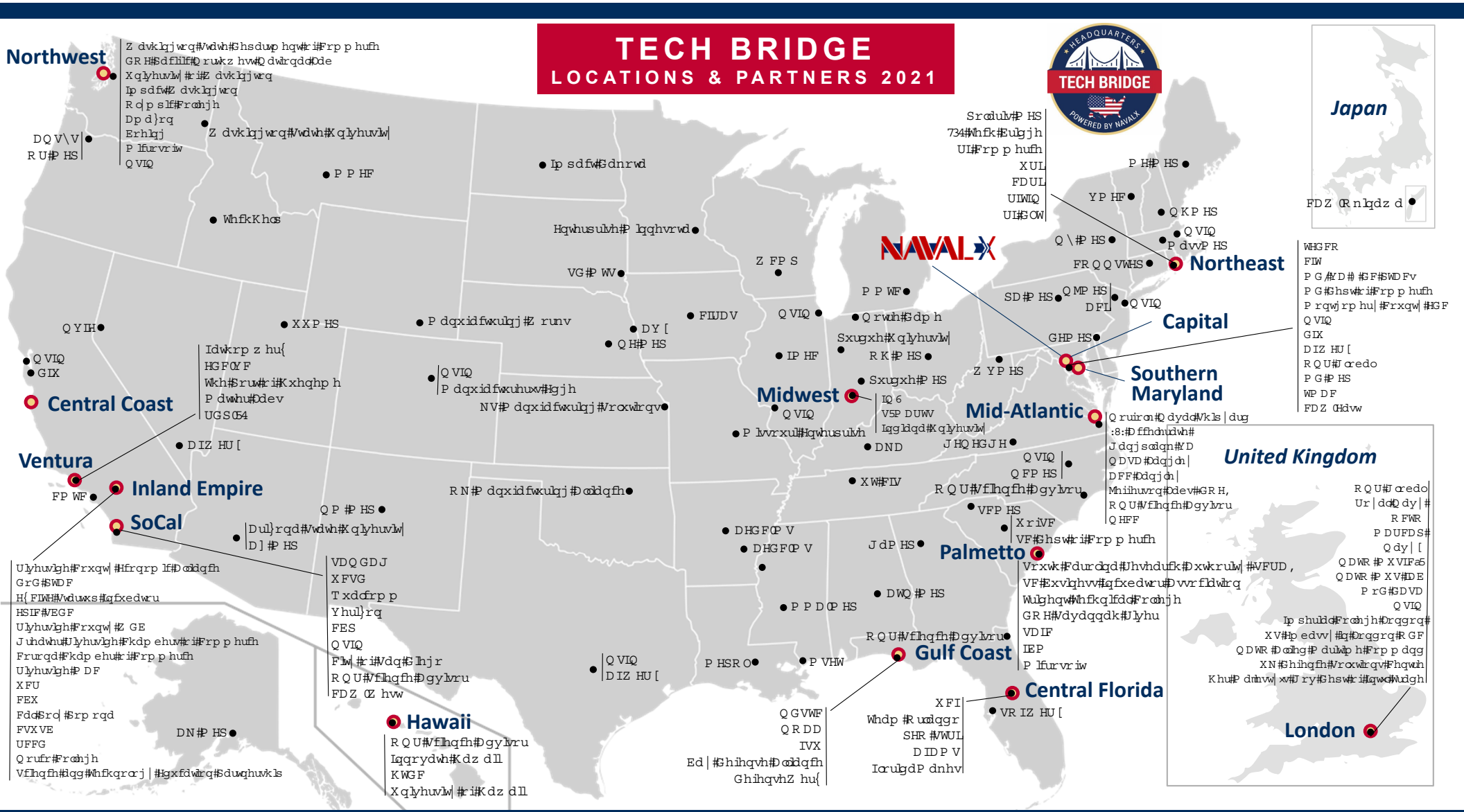
Tech Bridge Methodology



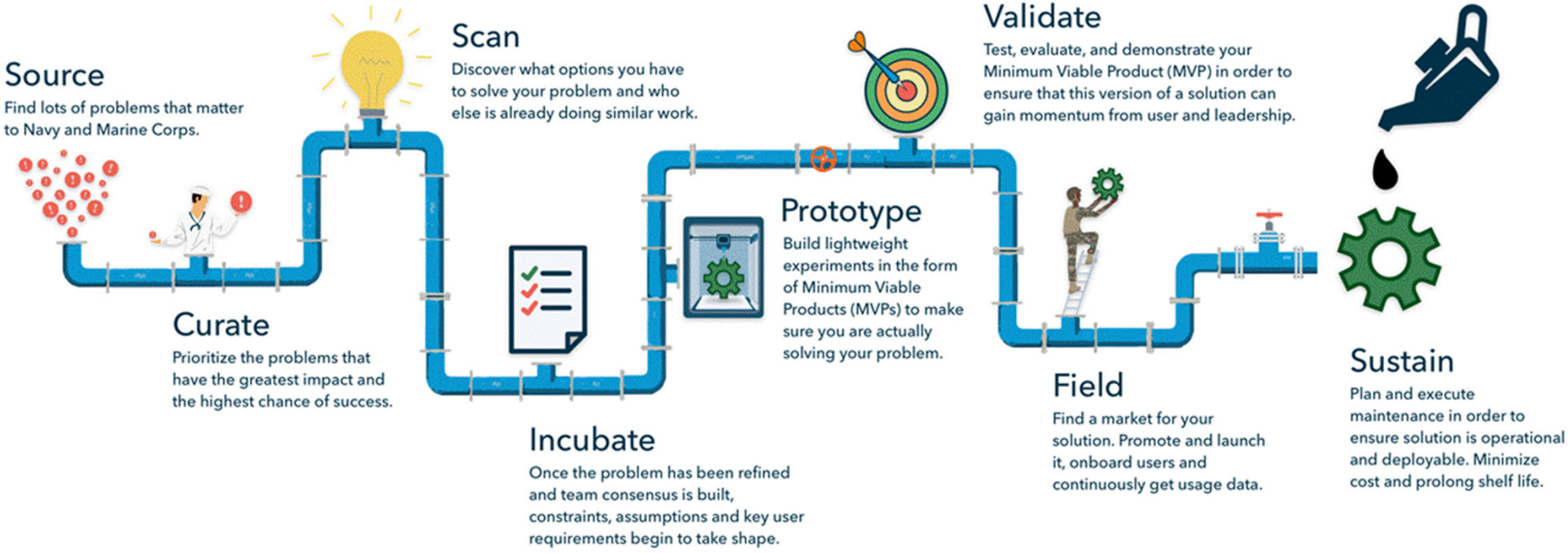
TECH BRIDGE
LOCATIONS



TECH BRIDGE
LOCATIONS & PARTNERS 2021



Pipeline



Capability

5G Living Lab

Problem
- Chinese global market dominance in 5G technology
- MCICOM- Energy Resilience Symposium
- Mobility Symposium
- C-Intrusion Symposium

→ Installation Next → Market Search
- NIWC Pac
- Qualcom
- In-Q-Tel

→ NIWC Pac CRADA w/ Verizon → Verizon
- Site Discovery
- Infrastructure
- SMEs

→ nextSTEP & ONR → Verizon @ Miramar Install → Congressional Funding
- Verizon
- SoCal TB PM
- Congressional Funding through NAVFAC to US Ignite BAA

COVID-19 PPE

Problem
- COVID Personal Protection Equipment

→ Local Support from Regional Partners → Market Search
- USFK- ONR Tech Solutions $200K, KP NISE: $500k

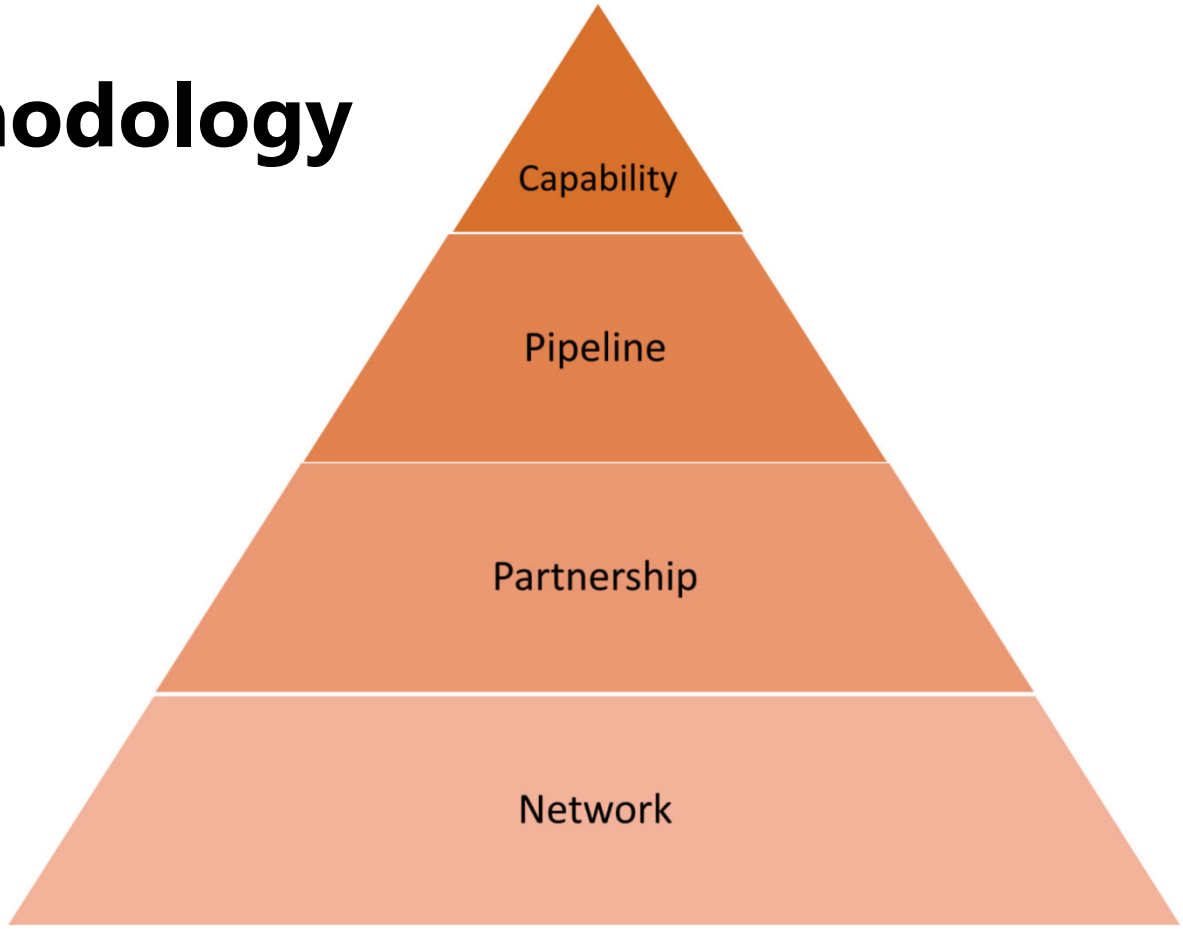
→ UAF CRADA → DASN RDT&E AM EXCOM AM Team Army MEDCO → DASN RDT&E AM EXCOM AM Team Army MEDCOM → Resulting in Reusable N95 Mask

Shipyard Maintenance

PSNS/ NWTV → Tech Bridge/ NIPA Start → Market Search
- Jan 2020: Industry Day Hosted

→ 2 companies on contract. → 2 Prototypes - $1M ONR, $1.2 NAVSEA 04T1, $550k PSNS → Deliver EQPT → *Execute*

Tech Bridge Methodology



Questions?

PRESENTED BY:

CDR Bobby ‘snocone’ Hanvey
Exec. Director, Mid-Atlantic Tech Bridge

Key Results – FY 20

- Opened HQ space in DC
- CAW trained over 3,000 students
- Human Centered Design focused facilitation
- Facilitated more than $40 million to SBIR to solve maintenance challenges
- Hosted 2nd Annual NavalX Agility Summit
- Released more than 200 Quick Chats with Mohawk Matt
- Released 12 Seaside Chats
- **4 Million** Interactions hosted on our social platforms
- **Est. 2020** Established the Federal Innovators Salon
- Released 32 NavalX Connecx Podcast episodes
- Tech Bridges involved in 126 special projects including Unmanned Campaign and Project Overmatch
- Launched Navy Cloud Playbook
- Enabled PPE production at scale within months
- Launched Digital Engagement Platform (DEP)

Naval Surface Warfare Center
Dahlgren Division
Dam Neck Activity

Command Overview

CDR Michael P. Aiena
Commanding Officer

Barry Stevens
Chief Scientist

WELCOME

MATB/TASC
Industry Day

May 6, 2021

Naval Superiority is NO LONGER Guaranteed

We have a sense of urgency

!! WE ARE IN THE THREAT BUSINESS !!

Command Mission

To be a recognized R&D and Engineering National leader developing innovative, affordable, and effective threat-driven integrated training systems, cyber warfare, fleet readiness and sustainment and system safety engineering solutions for the Naval Warfighter.

Vision

Defeat all current and future national threats with cyber and safety resilient tactical and training systems fortified with exemplary fleet readiness.

R Dept – Readiness & Training Systems

Technical Capabilities and Workforce Disciplines

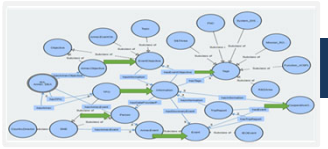
- **DD18** Surface & Expeditionary Warfare Systems Safety
- **DD21** Asymmetric Warfare Engineering & Embedded Systems
- **DD22** Digital and Non-Physical Vulnerability Analysis
- **DD35** Integrated Surface Combat Control Systems Support
- **DD36** Integrated Training Systems
- **DD37** Radar Distribution Systems

Disciplines	
Scientists & Engineers	377
Technicians/ Specialists	185
Clerical	7
Administrative	56
Students	23
Total	648

Lines of Business

Intelligence & Cyber Technology

Integrated Training Systems



Combat Systems Readiness

Systems Safety Engineering

Notable Technologies

- Cyber T&E
- Digital Engineering
- Data Analytics/AI
- AR/VR Training Systems
- Cloud Technologies

Civilians: 648 | **CTRS:** 550 | **Portfolio Size:** $350M

- Leader in Surface Warfare Training Systems
  - Shore-Based Combined IAMD/ASW Trainer (CIAT)
  - Shipboard Advanced Training Domain (ATD)
  - Shipboard Battle Force Tactical Trainer (BFTT)
  - Live-Virtual-Constructive (LVC) Training
- Technical leaders in Cybersecurity Test and Evaluation – NAVSEA Red Team Lead
- Leader in Systems Safety Analysis and Engineering
- R&D Organization interfacing with the Navy Fleet through approximately 3,000 Annual discrete Fleet Support Events

Business Areas and Technology Focus Areas

- ***Intelligence & Cyber Technology***
  - *Rapid Response Engineering*
- ***Integrated Training Systems***
  - *Virtual Maintenance Training*
  - *Ready Relevant Learning FNC*
  - *Naval Simulation Center Atlantic*
- ***Combat Systems Readiness***
  - *Predictive Analytics for COTS-Based Systems*
  - *Model-Based Product Support and Informing Development Processes*
  - *Continuous Integration/Continuous Deployment*
- ***Systems Safety Engineering***
  - *Artificial Intelligence*
  - *Software Factory*
  - *Model-Based System Engineering*

Summary

- ***NSWCDD Dam Neck Activity is the Naval Surface Warfare Center R&D Organization on the Waterfront***

- ***Improving Training and Readiness through Innovation***
  - *Artificial Intelligence, Machine Learning*
  - *Data Analytics*
  - *Digital Engineering*
  - *Augmented and Virtual Reality (AR/VR) Technologies*
  - *Rapid Prototyping, 3D Printing*
  - *Remote Readiness*

For more information, please contact:

NSWCDD DNA Chief Scientist: B. Stevens, barry.j.stevens@navy.mil

NSWCDD Small Business Office Home Page and Long Range Acquisition Forecast:
https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Dahlgren/NSWCDD_Small_Business_Office/

NSWCDD Deputy Director for Small Business: Kristopher Parker, kristofer.parker@navy.mil

Thank You

Naval Surface Warfare Center, Carderock Division

AMERICA'S FLEET STARTS HERE

Command Overview

Naval Surface Warfare Center, Carderock Division

CAPT Todd E. Hutchison
Commanding Officer, NSWCCD

April 2021

Lawrence Tarasek, SES
Technical Director, NSWCCD

NAVSEA Warfare Centers

10 Divisions – 1 Team

NSWC Crane Division
Crane, Ind.

NSWC Carderock Division
West Bethesda, Md.

NSWC Panama City Division
Panama City, Fla.

NSWC Dahlgren Division
Dahlgren, Va.

NSWC Port Hueneme Division
Port Hueneme, Calif.

NSWC Philadelphia Division
Philadelphia, Penn.

NSWC Corona Division
Corona, Calif.

NSWC Indian Head Explosive Ordnance Disposal Technology Division
Indian Head, Md.

Naval Surface Warfare Center

Naval Undersea Warfare Center

NUWC Keyport Division
Keyport, Wash.

NUWC Newport Division
Newport, R.I.

About Carderock

NAVSEA
WARFARE CENTERS
Carderock Division

MISSION

Naval Surface Warfare Center, Carderock Division's (NSWCCD) mission is to provide full-spectrum research and development, test and evaluation, analysis, acquisition, and Fleet support for the Navy's ships, ship systems, and associated Navy logistics systems. Specific emphasis is to provide the core technical capabilities required for the integration of surface and undersea vehicles and associated systems, to develop and apply science and technology associated with naval architecture and marine engineering, and to provide support to the maritime industry.

VISION

Our vision is to be the Navy's trusted partner for identifying and providing world-class, cost-effective, and innovative technical solutions for advanced ships and ship systems, enabling the warfighter to execute their missions and maintain their technological edge.

CORE EQUITIES

Full-spectrum, life-cycle naval architecture and marine engineering for ship, submarines, boats, craft and unmanned vehicles

- *Ship Design & Integration*
- *Hull Forms and Propulsion Systems*
- *Structures and Material Systems*
- *Environmental Quality Systems*
- *Vulnerability and Survivability Systems*
- *Signatures and Silencing Systems*

HISTORY

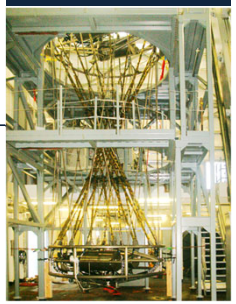
1937 – Carderock site approved

1896 – Experimental model basin established

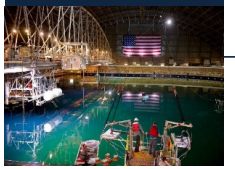
1967 – First large-scale model submarine test vehicle delivered to Acoustic Research Detachment (ARD) Lake Pend Orielle, Idaho

1967 – Combatant Craft Det established (Little Creek, Va)

2008 – Twisted Bicone Arrays installed at STAFAC, SEAFAC



2013 – Modeling and Seakeeping (MASK) basin renovated (West Bethesda)



Carderock by the Numbers

NAVSEA
WARFARE CENTERS
Carderock Division

Resources (FY20)

- Navy Working Capital Fund Organization
- $802M Total Obligation Authority
- $317.7M Contract Obligations
  - 43.99% Small Business

Facilities

- 7 detachments with unique missions
- Hydro, structural & acoustic laboratories at WB site

Departments

- 3 technical departments
- 3 business departments

Workforce

- 2,671 Civil Service
- 1 Military
- 1,706 Scientists & Engineers
- Education
  - 191 PhDs
  - 754 Masters
  - 1,274 Bachelors
- 97 Student Interns
- 16 Visiting Professors

12 yrs. average service

43 yrs. average age

Top 5 Sponsors

- PEO Submarines
- PEO Columbia
- PEO Ships
- PEO USC
- Office of Naval Research

Top Engineering Fields

- Mechanical Engineer
- Naval Architect
- Chemical, Computer, Environmental Engineer
- Materials Engineer
- Electrical Engineer

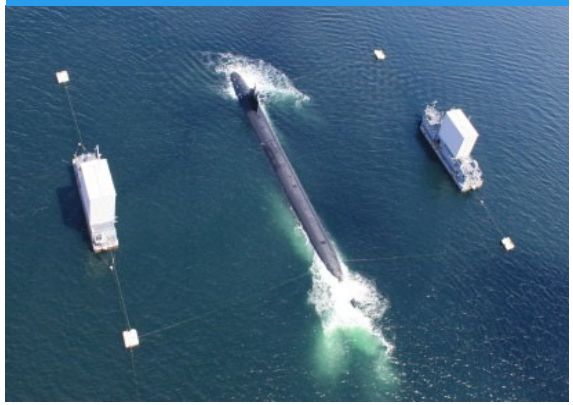
Carderock: What We Do

NAVSEA
WARFARE CENTERS
Carderock Division

SCIENCE & TECHNOLOGY

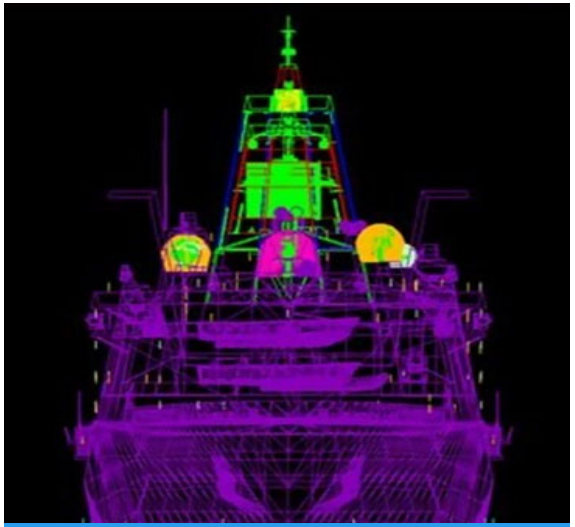
ACQUISITION & CONSTRUCTION

TEST & EVALUATION



MODERNIZATION & IN-SERVICE ENGINEERING

RESEARCH & DEVELOPMENT



ADVANCED CONCEPTS AND DESIGNS

Carderock: Where We Work

NAVSEA
WARFARE CENTERS
Carderock Division

Southeast Alaska Acoustic Measurement Facility
KETCHIKAN, AK

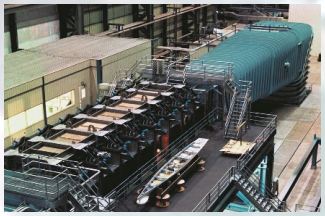
Carderock Division
HEADQUARTERS
WEST BETHESDA, MD

Puget Sound Detachment
at Naval Submarine Base Bangor
BANGOR, WA

Norfolk Detachment
Combatant Craft Division
NORFOLK, VA

Acoustic Research Detachment
BAYVIEW, ID

Acoustic Trials Detachment
TITUSVILLE, FL



Memphis Detachment
Dr. William B. Morgan
Large Cavitation Channel
MEMPHIS, TN

South Florida Ocean Measurement Facility
DANIA, FL

Departments

Corporate Operations Department

Contracts Department

Comptroller Department

Platform Integrity Department

Naval Architecture & Engineering Department

Signatures Departmer

Summary

NAVSEA
WARFARE CENTERS
Carderock Division

Science & Technology | **Research & Development Prototyping** | **In-Service Fleet Support**

- Dedicated, talented workforce
- World-class facilities
- Active collaborations with Government, industry, academia
- Providing critical support to today's Navy and tomorrow's fleet

We do things for the warfighter that industry can't, won't or shouldn't do

Naval Information Warfare Center ATLANTIC

Naval Information Warfare Center Atlantic

Suzanne Huerth, PhD, SSTM
Science and Technology Director
NIWC Atlantic

Naval Information Warfare Center ATLANTIC

NIWC Atlantic's Mission and Vision

Mission: Serving our Nation by delivering information warfare solutions that protect national security. Includes: communication systems (radios), networking systems (routers/switches), cyber operations (red team/forensics/network defense), intelligence, surveillance, reconnaissance (sensors/decision support applications), business systems (benefits/personnel) and information security.

8 Technology Focus Areas (TFAs) to Achieve Technology Goals

Technology Strategy and TFA analysis drives work acceptance and lab/facility infrastructure allocations and tools.

Artificial Intelligence: Provide warfighters with analytics-driven, data-informed, and technology-empowered capabilities to drive decision advantages and optimal mission outcomes.

Assured Communications: Addresses the demand for resilient, and sometimes covert, wired and wireless communications in degraded and/or denied environments.

Cloud Computing: IT modernization and digital transformation for resilient infrastructure, platform and software services.

Cybersecurity: Provides protection from unauthorized use of and/or defends electronic data, hardware, software from disruption or of the services they provide.

DevSecOps: Refers to replacing siloed Development, Security and Operations to create multidisciplinary teams that collaborate with shared and efficient practices and tools.

Mobility: Provide Wireless Technology and enterprise access for the warfighter to engage with a mobile environment and applications, anytime, anyplace.

Model-Based Systems Engineering (MBSE): Technologies used to support the development, management and application of virtual constructs of varying fidelity across the spectrum of systems engineering.

On-Demand Manufacturing: Produce products and/or components, when or as they are required at the point of use, using additive and/or traditional manufacturing methods.

INFORMATION WARFARE RESEARCH PROJECT

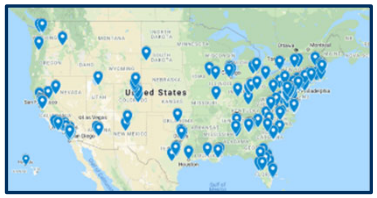
Advancing Naval Information Warfare Through Rapid Prototyping on a Global Scale

Mission to foster collaboration between Government, Industry and Academia to identify, develop and demonstrate the enabling technologies necessary to enhance the Navy and Marine Corps mission effectiveness in the field of Information Warfare.

FY20 Total Prototype Awards: 42
Total Production Awards: 3

IWRP is the first Naval Consortium to have successful prototypes transitioned to production

Membership Spans 37 States



Since Oct FY19 800+ Structured collaboration engagements between industry and the government **Become a member**
https://www.theiwrp.org

30 Sep.

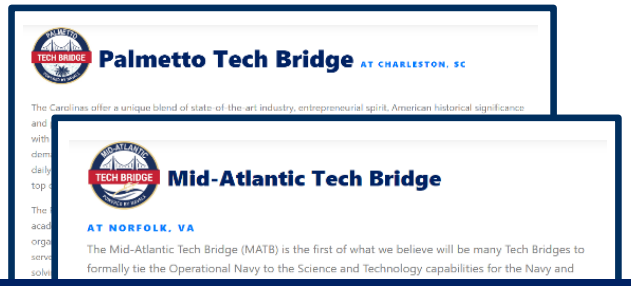
Nontraditional Industry bases allows access to move innovative capabilities 77%

NAVALX

Focused on scaling nontraditional agility methods across the DON workforce

NavalX serves as DON workforce "super-connector," focused on scaling nontraditional agility methods across the DON workforce.

The approach is to connect to pockets of excellence to capture and scale the methodologies being employed, increasing awareness of cross-DoD and external successes, lessons learned, and subject matter experts.



NIWC Atlantic developing a regional naval innovation ecosystems centered around the NIWC Atlantic labs that support greater collaboration with academia and industry on projects with Naval Information Warfare relevance

Naval Information Warfare Center
ATLANTIC

Serve our Nation by delivering information warfare solutions that protect national security.

WIN THE INFORMATION WAR.



NIWC Atlantic is part of the Naval Research & Development Establishment (NR&DE)

Web: https://www.niwcatlantic.navy.mil Facebook: https://www.facebook.com/NavalInformationWarfareSystemsCommand
Twitter: https://twitter.com/navwarHQ Instagram: https://www.instagram.com/spawarhq/ Linkedin: https://www.linkedin.com/company/spawar/
Glassdoor: https://www.glassdoor.com/Overview/Working-at-SPAWAR-Systems-Center-Atlantic-EI_IE638508.11,41.htm
Employment opportunities: https://www.usajobs.gov/ NIWC Atlantic Small Business: https://www.niwcatlantic.navy.mil/for-industry/
NAVWAR Contract Directorate Office: https://e-commerce.sscno.nmci.navy.mil


757
COLLA
B
MATB Industry Day
May 6, 2021

757 COLLAB

WHO & WHAT ARE WE?

WHAT WE DO?

MATB PARTNERSHIP

HOW TO CONNECT

757 COLLAB
WHO ARE WE?

INTERCONNECTED | INCLUSIVE | IMPACTFUL

757 ANGELS

CAPITAL

757 ACCELERATE POWERED BY TOWNEBANK

PROGRAMMING

757 STARTUP STUDIOS

PLACE

140 ACCREDITED INVESTORS

$75M INVESTED IN VA SINCE 2015

HIGH-GROWTH & SCALABLE

VALIDATED BUSINESS MODEL

TOP 10 ANGEL NETWORK IN US

3-MONTH SELECTIVE, MENTORSHIP DRIVEN, MILESTONE-BASED PROGRAM

$20K NON-DILUTIVE GRANTS

19 COMPANIES

180 MENTORS

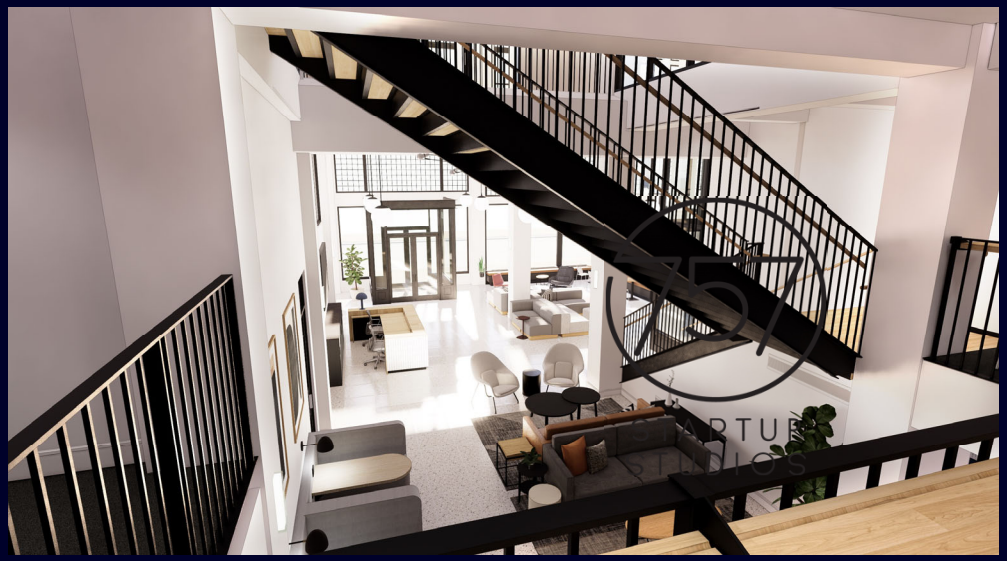
$22M CAPITAL RAISED SINCE 2018

$9.2M REVENUE GENERATED

68% UNDEREPRESENTED

886 MENTOR HOURS

757 STARTUP STUDIOS @ ASSEMBLY



CAMPUS FOR INNOVATORS & CREATORS

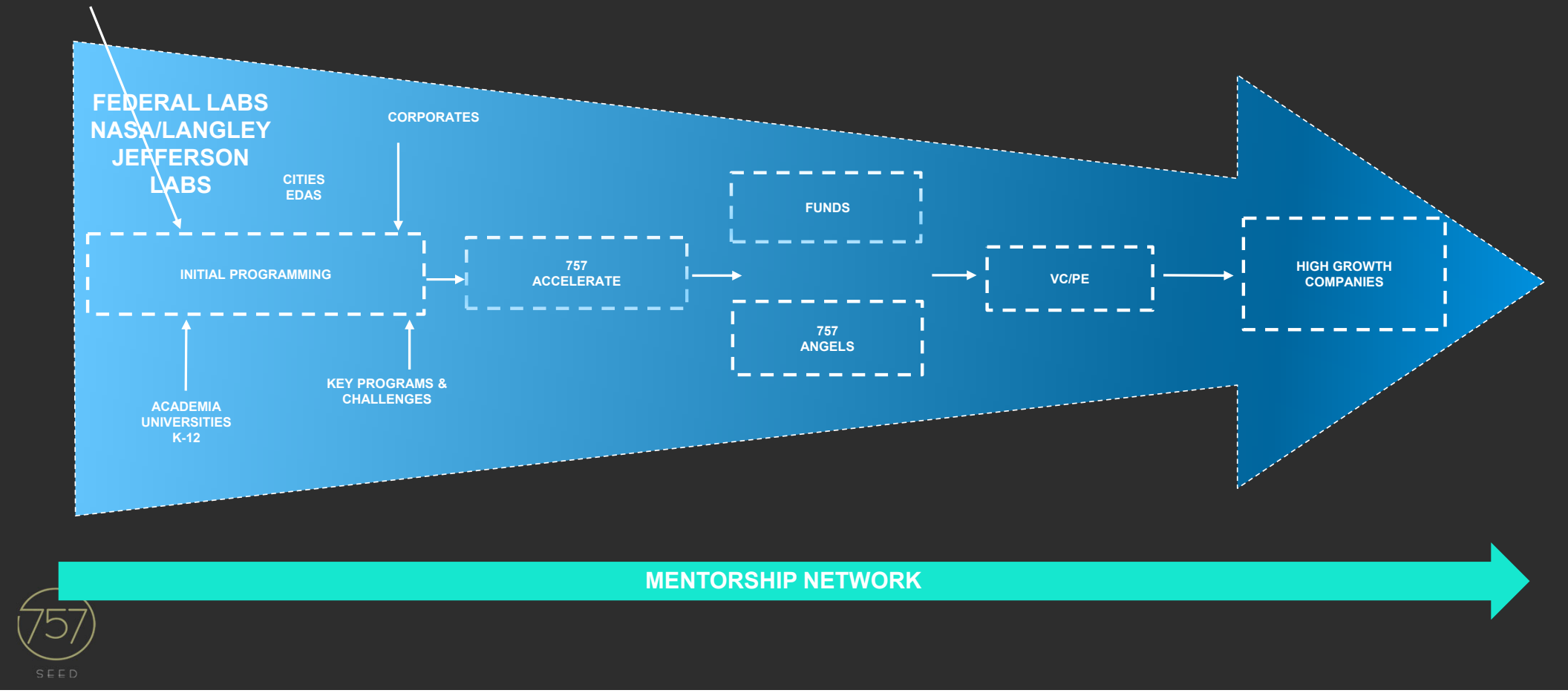
757

STARTUP STUDIOS

FRONT DOOR TO THE ECOSYSTEM

HAMPTON ROADS

INNOVATION PATHWAY



757 SEED


757
COLLAB
MID-ATLANTIC
TECH BRIDGE
POWERED BY NAVALX
MATB
SPACE | EVENTS | SBIR |TECH MATCHING

Gangplank
VIRGINIA

Mid-Atlantic Tech Bridge

Our mission is to explore new ideas and enable others to create and deliver products with a purpose.

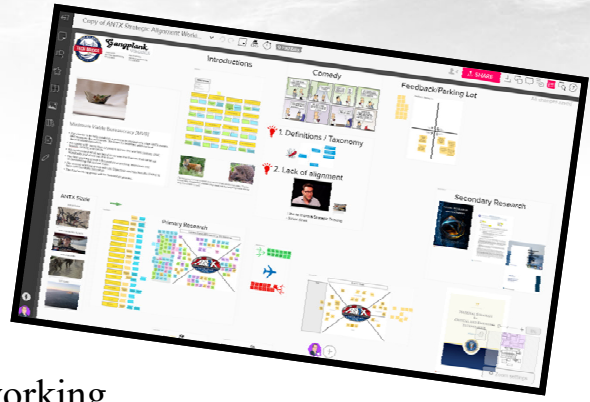
Mission

ORIGIN STORY

Gangplank Collective

- Derek Neighbors founded Gangplank Collective
- Since 2008, multiple locations were established:
  - Chandler, Arizona
  - Queen Creek, Arizona
  - Norfolk, Virginia (previously RVA)
- Varied programing to include:
  - Academy
  - Business
  - Health
  - Junior
  - Labs
  - Studios
  - Local Outreach
- Hard Yards UVA Darden Project
  - Technology transition
  - Quasi-governmental relationships (PIA)
  - Collaboration, funding, product management

Executive Summary



- ONR and the Mid-Atlantic Technology Bridge (MATB), hosted facilitated working groups the week of 16-20 November 2020 to identify opportunities to strategically align ANTX events.
- This workshop identified that there are inherently two aspects of ANTX events, learning and earning; perhaps more importantly, there is a significant tradeoff between the two. Optimization and focus will increase transition, but it will reduce learning and the range of unexpected outcomes that currently benefit ANTX stakeholders.
- Recommended ONR Global - Experimentation and Analysis implement a Kanban board to visualize and track ANTX events from an enterprise perspective.
- Given the multitude of potential sources of guidance, we recommend OPNAV and ONR collaborate to communicate the top priority documents.
- The practice of Objective and Key Result (OKR) development early in the planning process will clarify the anticipated outcomes for senior leaders.

Gangplank

THANK YOU

Jason Lamb

+1 (757) 276-1864

jason@gangplankva.org

www.gangplankva.org

Questions?