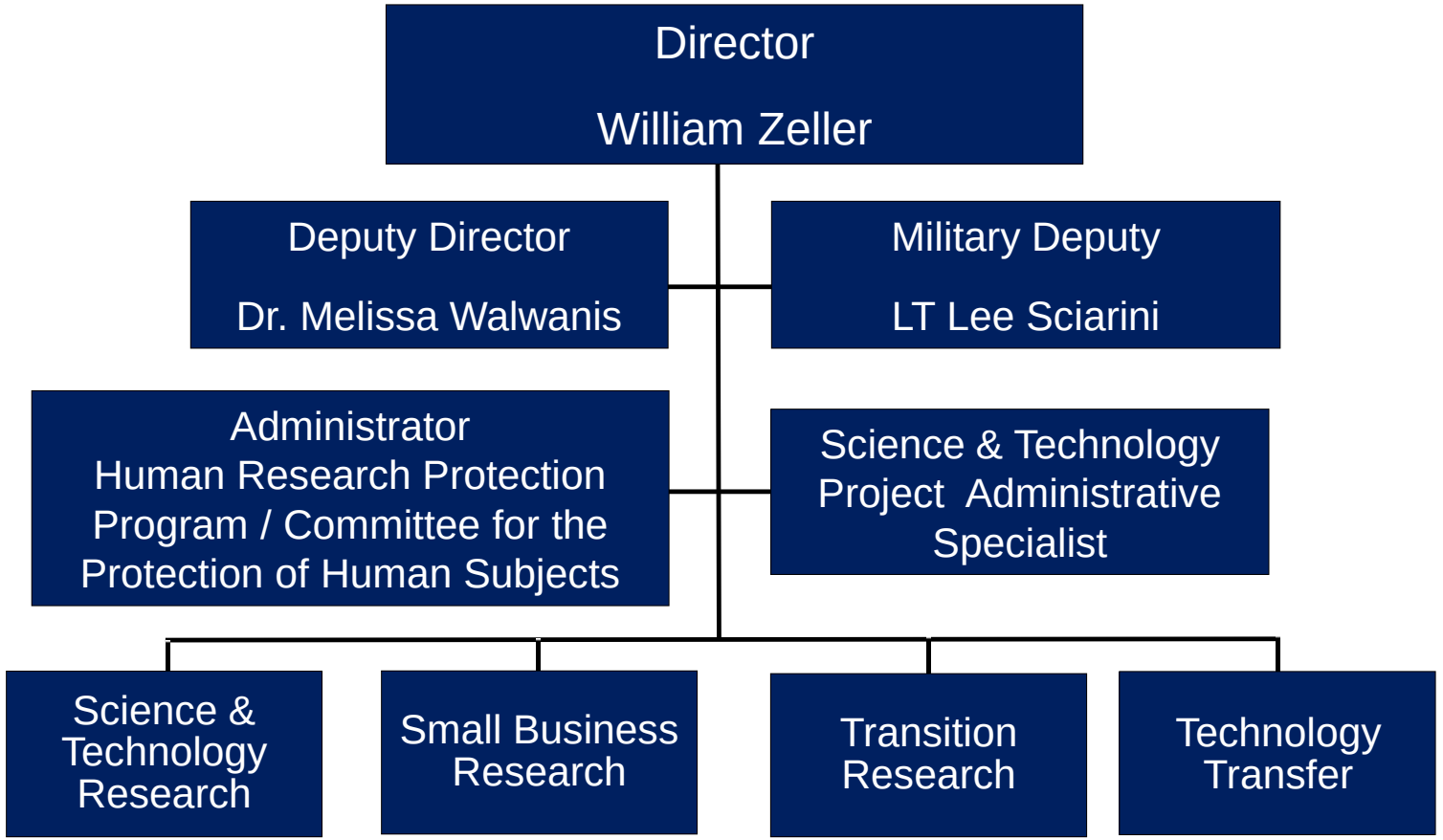
NAWC
Training Systems Division
NAVAL AIR WARFARE CENTER

William Zeller – Director, Research & Technology Programs

Program Directorate, Research & Technology



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NAWCTSD Research Portfolio

•NAWCAD/Office of Naval Research Science & Technology (*BA1-3)

- Basic Research
- Applied Research
- Advanced Development

• DoD Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program

• Navy Demonstrations and Validation Research (*BA4-7)

• DoD Research

- Joint/OSD/DARPA
- Army/USAF/USMC Research

• Technology Transfer (Gov/Non-DoD Research)

*BA: Budget Activity

NAWCTSD is a R&D Performer and Partners with Industry and Academia on Proposals and Subsequent Research Efforts

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Small Business Innovation Research (SBIR) Opportunities

- Process (2-3 SBIR solicitations per year)
- Phase I (1st year): Scope problem & detail innovative solution ($75K/$100K option)
- Phase II (2nd-3rd years): Develop prototype, test & evaluate (up to $1.3M)
- Phase III (thereafter): Further R&D development / acquisition transition (Government sole source)

Next Broad Agency Announcement (navysbir.com):

➔ OPEN (23.4) Pre-release: 15 Jun 2023 Opens: 13 Jul 2023 Closes: 15 Aug 2023

SBSA

Competitive

All contracts Processed at NAWCAD, Lakehurst

Phase I: 4 Months w/ 6 Month Option

Phase II: Up to 24 Months

Phase III: Open

Jun 2023 — **RFP RELEASE**

Aug 2023 — **Contract Award**

Name: William Zeller

Organization: PDR&T Program Office

Phone: (407) 380-4146

Email: ORLO_PDRT@navy.mil

Year 1	RDT&E $75K/ $100K
Year 2-3	RDT&E $1.3M
Year 4+	Non-SBIR $s; No Limit/ No Competition Required

TBD – Up to 3 Awards Planned Per Topic

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Small Business Technology Transfer (STTR) Opportunities

- Small Business Required to Team with Research or Academic Institution (non-Government)
- Phase 1(1st year): Scope Problem & Detail Innovative Solution ($75K/ $100K option)
- Phase II (2nd & 3rd years): Develop Prototype, Test & Evaluate ($1.3M)
- Phase III (Thereafter): Further R&D Development/Acquisition Transition (Government Sole Source)
- Large Businesses can Partner with Small Businesses (for Phase III)

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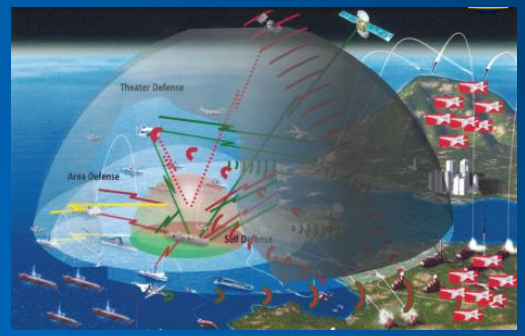
Continuing Areas of Research

Emerging Instructional Methods

- Adaptive Training Techniques
- AI Enabled Instructor/Crew
- Scenario Based Trg Methods
- Multi-level Performance Measurement & Assessment
- Human Performance Measurement Approaches



Challenge Areas Supported

- Denied & Degraded Environments
- Electronic Maneuver Warfare
- Integrated Warfighting Capability
- Cyber Warfare
- Manned-Unmanned Teaming

Training Technology & Environments

- Data Science (AI/ML)
- eXtended Reality Visual & Input Enhancements
- Live, Virtual, Constructive
- Distributed Mission Training
- Effects Modeling
- Mobile Learning/Deployable
- Cybersecurity & Cloud-based

Instructional Strategy

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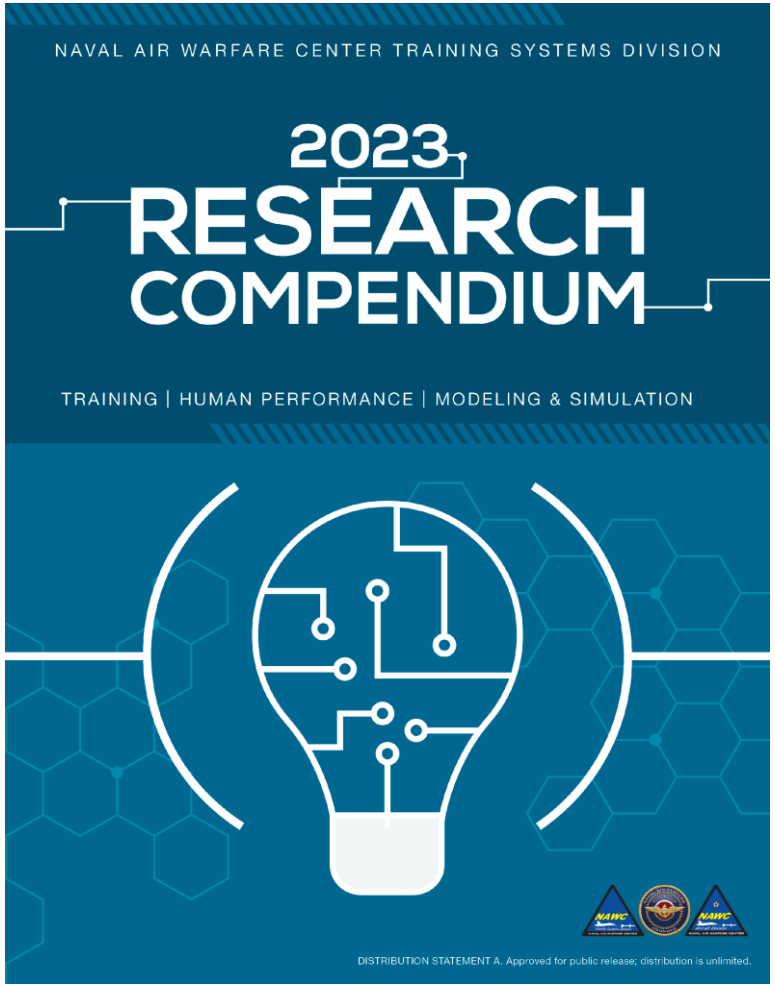
NAWCTSD Research Compendium



Research Compendium can be found at the bottom of the NAWCTSD Web site Home page:
https://www.navair.navy.mil/nawctsd/

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Technology Transfer: Partnering with Industry, Academia, State/ Local Government

Software License Agreement (SLA)

- Agreement between NAWCTSD and an Industry partner which allows them to make, use and sell federally developed software with the assurance that we will not sue for infringement.
- NAWCTSD retains rights to use the software for government purposes.
- Industry partner pays royalties to NAWCTSD.

Patent License Agreement (PLA)

- Agreement between NAWCTSD and an Industry partner which allows them to make, use and sell federally owned inventions with the assurance that we will not sue for infringement.
- NAWCTSD retains rights to use the technology for government purposes.
- Industry partner pays royalties to NAWCTSD.

Search for us on federallabs.org/flcbusiness for more information on available technologies.

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Technology Transfer: Partnering with Industry, Academia, State/ Local Government

Cooperative Research and Development Agreement (CRADA)

- Allows R&D collaboration between NAWCTSD and non-federal partners.
- Provides the means to offer intellectual property (IP) rights to a non-federal partner.
- NAWCTSD can provide:
  - Personnel
  - Facilities/Equipment
  - Intellectual Property (IP)
  - NO funds
  - Non-federal party can provide:
  - Personnel
  - Facilities/Equipment
  - Intellectual Property (IP)
  - Funds

Commercial Service Agreements (CSA)

- Allows the sale of defense articles and/or services that are not available from any United States commercial source.
- Makes services of any government laboratory, center, range or other testing facility available for testing purposes on a reimbursable basis.
- Relies on existing capabilities and expertise
- Requires full reimbursement of Government costs
- Cannot compete with United States private industry

New site launched that highlights Navy Tech Transfer Partnering Opportunities and Navy Laboratory Capabilities: navytechtransfer.navy.mil

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How to Participate in NAWCTSD Research

- Tell us about your Independent Research and Development (IRAD) efforts

- Respond to SBIR/STTR Solicitations
  - Small Business – Large Business Partnering, Academia can be included

- Pursue Cooperative Research and Development Agreements (CRADAs) with NAWCTSD when we find an area of common interest
- Partner on Joint Proposals (Scientist to Scientist/Engineer to Engineer)
  - If successful w/joint proposals several contract vehicle options available:
    - SBIR Phase III
    - NAWCTSD R&D Broad Agency Announcement (S&T projects only)
    - ONR/DoD/funding agency contracting
      - onr.navy.mil/en/work-with-us/funding-opportunities

- Consider new opportunities available through the Tech Grove

Research & Technology Program Office POC	
Director, William Zeller	Deputy Director, Melissa Walwanis, Ph. D.
(407) 380-4146 / ORLO_PDRT@navy.mil	(407) 380-4749 / ORLO_PDRT@navy.mil

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Central Florida Tech Grove

An engine to accelerate the government's access to companies that have not traditionally done business with DoD.

Provides education, support, and access to entrepreneurs and small businesses wanting to connect with the Modeling, Simulation & Training industry.

Checkout these sites for upcoming events:

Centralfloridatechgrove.org
Linkedin.com/company/cftechgrove/

Reach out:

NAWCTSD_Tech_Grove@us.navy.mil

Central Florida Tech Grove
Partnership IV

12809 Science Drive
Orlando, FL 32826

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NAWCTSD & Team Orlando STEM Outreach

	FY19	FY20	FY21	FY22	FY23 (Updated May 2023)	Impact Growth To-Date
Geographic Reach	5 Brevard Orange Osceola Seminole Volusia	5 Brevard Orange Osceola Seminole Volusia	**7** Brevard Orange Osceola Seminole Volusia Duval Hillsborough	**7** Brevard Orange Osceola Seminole Volusia Duval Hillsborough	**9** Brevard Duval Hillsborough **Miami-Dade** Orange Osceola **Pinellas** Seminole Volusia	
Students	7,692	12,775	44,194	62,855	**93,826**	**1120%**
Teachers	200	3,963	5,640	6,172	**7,794**	**3797%**
DoD S&Es, Mentors, Volunteers	119	94	130	168	**266**	**124%**
Unique Events/Programs	15	18	21	22	**26**	**73%**

Our Science, Technology, Engineering, and Mathematics (STEM) outreach portfolio is supported by uniformed and civilian DoD volunteers, industry and academia subject matter experts who fulfill ONR's STEM mission to:

- ***Inspire, engage, and educate*** the next generation of scientists and engineers, technology professionals, and medical professionals;
- ***Employ, retain, and develop*** diverse civilian and military technical workforce; and
- ***Collaborate across the Naval STEM communities, and with other agencies*** to maximize benefits to the DoN.

Programs include

- DOD STARBASE Central Florida STEM Academy!
- Modeling & Simulation
- Robotics & Programming/Coding
- Mentoring & Parent-Student Workshops
- Leadership Development
- GEMS STEM Camps
- SEAPERCH Competitions/Judging
- Teacher Professional Development
- Job Shadowing
- Career Fairs & STEM Open Houses *and more!*

If you would like to participate as a volunteer or learn how to support our STEM outreach initiatives, please contact Ms. Emily Sherkow

EMILY.M.SHERKOW.CIV@US.NAVY.MIL W: (407) 380-8333 C: (386) 748-2307

Visit NAWCTSD STEM at https://www.navair.navy.mil/nawctsd/node/351 to learn more!

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