Fight the Naval Force Forward
Integration of Tactics and Technology

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"Deliver performance at the speed of relevance. Success no longer goes to the country that develops a new technology first, but rather to the one that better integrates it and adapts its way of fighting."


NDS Implementation requires integrated and focused teams of Operators, Technologists, and Acquisition Professionals

• Tactics and Technology Exploration and Experimentation (TnTE2) method integrates Operators and Technologists
• New Authorities in place to accelerate R&D and transition to acquisitions
• Commercial Solutions Opening (CSO) Pilot Program
Fight the Naval Force Forward
Task Force Summary

- OPNAV N9 / DC CD&I / DASN(RDT&E) Championed Task Force
- Initiating a Multi-Year Prototyping and Experimentation Campaign for a emerging and priority warfighting concept
  - MCWL Ellis Group / NR&DE Team
  - Cross NR&DE effort with SSC Pacific as Lead Capability Integrator
  - 21st Century Combined Arms ANTX – April 2019
- Piloting new acquisition authorities, methods and tools
  - Tactics and Technology Exploration and Experimentation (TNTE2)
  - Middle-Tier Acquisition (NDAA16 Section 804)
  - Commercial Solutions Opening (CSO)

We are here

Fight the Naval Force Forward
Prototyping and Experimentation Campaign Plan

- Naval R&D
- Industry R&D
- Commercial Tech

**Fleet/Force Endorsed Task Force**

- TF Established
- CSO – Call to Industry
- Fleet/Force Engagement
- LVC Demo
- 21st Cen Combined Arms ANTX
- 21st Maneuver, Log, Force Pro ANTX

**21st Century Combined Arms Reference Architecture LVC Demo – Dec 2018**

**21st Century Combined Arms ANTX – Apr 2019**

**Maneuver, Logistics, Force Protection ANTX – Jul 2019**

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Advanced Naval Technology Exercises (ANTX) are a series of exercises led by the Fleet and the Naval Research and Development Establishment (NR&DE) where industry, academia, and Government R&D organizations are invited to demonstrate emerging tech that can address priority warfighting missions in 12- to 18-months.

>> Accelerating Acquisition with SPEED, SCALE, AND RIGOR >>

- Priority USN and USMC missions
- Low barrier to entry, loosely scripted events focused on exploring many-to-many Tech/Tactics pairings
- Traditional industry and non-traditional commercial partners
- ~100 Emerging Technologies
- 100s of Tactics and Tech Pairings
- 100s of Practicing Scientists and Engineers
- ~150 Operational subject matter experts
- 1000s of Technical and Operational Assessments collected over the course of 2-weeks time

Technical and Operational Assessments directly inform contract awards or other transactions for 12- to 18-month prototyping and experimentation projects that culminate with Fleet/Force experiments and/or Rapid Fieldings.
21st Century Combined Arms
ANTX – Notional Vision

- Swarming UxSs
- Persistent ISR
- OTH Targeting
- Live Virtual, Constructive (LVC) Environment
- Expeditionary C2
- Adaptive networks
- Anti-jam comms
- Overhead

Vendor Demos
Integrating Tactics and Technology Development - TNTE2 Continuum

**Exploration**
- Capability based tactics/technology demos in field representative environments

**Rapid Prototyping**
- Highly-valued and mature tactics/tech are ruggedized and integrated based on user inputs

**Fleet Experimentation**
- Tactics/tech are integrated for Fleet experimentation and limited user evaluations

**Rapid Fielding**
- Tactics/tech fielded for extended user evaluations
Commercial Solutions Opening Pilots

In accordance with DARS Tracking Number 2018-O0016, Class Deviation – Defense Commercial Solutions Opening Pilot Program, SSC Pacific, NSWC Crane, and NSWC Carderock issued complimentary CSOs:

**Commercial Solutions Openings:**

**21st Century Maneuver, Logistics and Force Protection technologies submit to:**
- N00167-19-S-C001
- [fightforward_21cmlfp@navy.mil](mailto:fightforward_21cmlfp@navy.mil)
- CSO closes December 21, 2018

Information Warfare focused technologies submit to:
- N66001-18-S-C001
- [fightforward_iw@navy.mil](mailto:fightforward_iw@navy.mil)
- CSO CLOSED

**21st Century Combined Arms focused technologies submit to:**
- N00164-18-S-C001
- [fightforward_21c2ca@navy.mil](mailto:fightforward_21c2ca@navy.mil)
- CSO CLOSED

Links posted to FedBizOps, Vulcan, LinkedIn, Fusion, and more.
Fight the Naval Force Forward Contracting Strategy

- Implementing Defense Commercial Solutions Opening (CSO) Pilot Program to issue CSOs
- Multi-Phase approach
  - Phase 1 – multi-month exploration phase – concludes with an ANTX
  - Phase 2 – Multiple Awards of contracts/OT-Prototypes as 12- to 18-mo projects
    - Fleet/Force Experiments
    - Rapid Fieldings
  - Technical and Operational Assessments inform selections
Scaling Methods and Tools

Under the Cognizance of the Fight the Naval Force Forward Task Force, this 3rd implementation of the TnTE2 method is piloting new authorities to prioritize R&D investments and to scale transitions to acquisitions:

– Naval Integration – USN/USMC Championed effort

– Federating priority efforts, evals inform ongoing priority initiatives

– NR&DE Live, Virtual, Constructive (LVC) range – enables rapid exploration of emerging technologies

– Multi-level security – proposals at GENSER SECRET and higher

– Multiple Experimentation Campaigns – 21st Century Combined Arms; and Logistics, Maneuver, and Force Protection

– Deliberate Contracting Strategy – competitive awards for rapid prototype/fielding decisions