

Naval Information
Warfare Center



Naval Information Warfare Center Atlantic

Advanced Naval Technology Experiments ANTX

13th Annual
Charleston Defense Contractors
Association Defense Summit

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

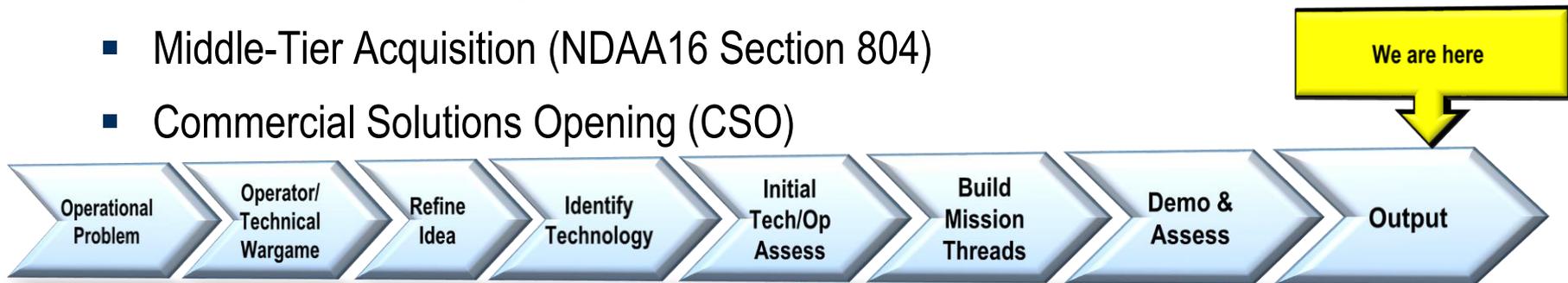
Advanced Naval Technology Exercises (ANTX)

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.

- ▼ Inform emerging operational CONOPs
 - DMO, EABO, LOCE, Swarm/C-UAS, etc
- ▼ Leveraging emerging technologies/ innovations – Industry/Govt/Academia
- ▼ Foster Innovation
 - Bringing industry, the Fleet, govt technologists, acquisition together for collaboration and rapid learning
- ▼ Identify most promising technologies based upon thousands of technical and operational assessments conducted in operationally relevant environment
- ▼ Insights and recommendations to RPED, S&T and other investments
 - Results provided to multiple stakeholders– ONR, MCWL, OSD, PEO's, MCCDC, OPNAV, RCO etc
 - Further experimentation often identified for FLEX or other events
- ▼ Concept Development insights and refinement
 - Learning from experimentation directly feeds back into further concept development and refinement

FNFF Task Force Summary

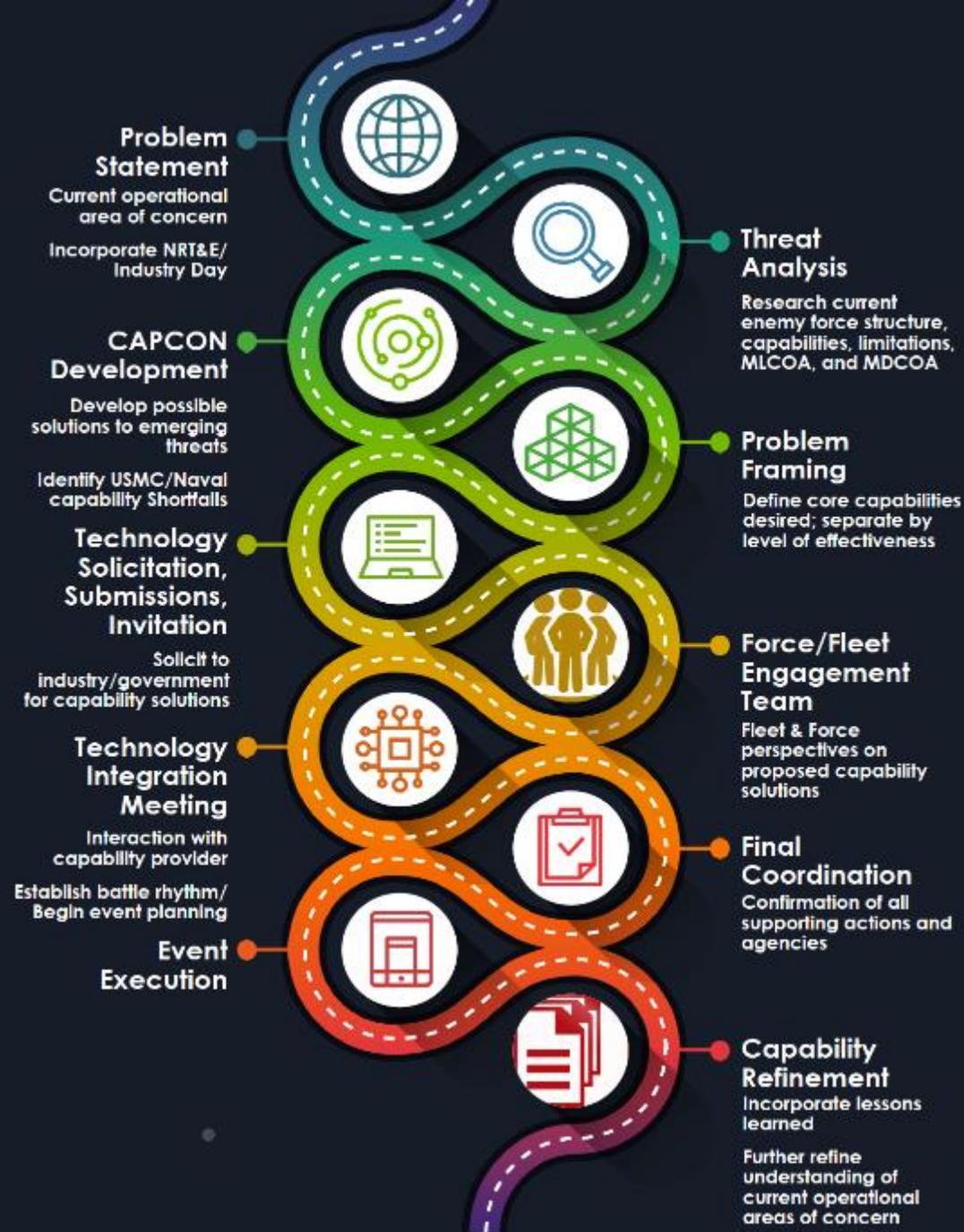
- ▼ FNFF Task Force was developed by OPNAV N9 / DC CD&I / DASN(RDT&E) in August 2018
- ▼ Initiating a Multi-Year Prototyping and Experimentation Campaign for an emerging and priority warfighting concept
- ▼ Directs MCWL to conduct ANTXs to examine emerging technologies and concepts
- ▼ Piloting new acquisition authorities, methods and tools
 - Tactics and Technology Exploration and Experimentation (TNTE2)
 - Middle-Tier Acquisition (NDAA16 Section 804)
 - Commercial Solutions Opening (CSO)



Process

Fight the Naval Force Forward (FNFF) -

Emergent warfighting concepts of *distributed maritime operations (DMO)*, *littoral operations in a contested environment (LOCE)*, and *expeditionary advanced base operations (EABO)*.





ANTX East – Fight the Naval Force Forward

63 proposals submitted from 35 Orgs

85 technologies evaluated for acq or dev

58 ANTX invitations sent across 35 orgs

- NIWC Atlantic**
- Field Event Execution Lead
 - Comms, C2 & UxS FA Leads
 - Nine Projects (53 engineers)
 - 20 Technical Assessors
 - Partnered with NSWC Port Hueneme, NSWC Carderock, NUWC Keyport

1900+ Technical and Operational Assessments

60+ Scientists/Engineers from NR&DE participated 61 tech assessors

41 Tech assessed as field-able <12 mos

28 Fleet SMEs from 14 different commands participated

61 Tech assessed as enhancing EABO operations

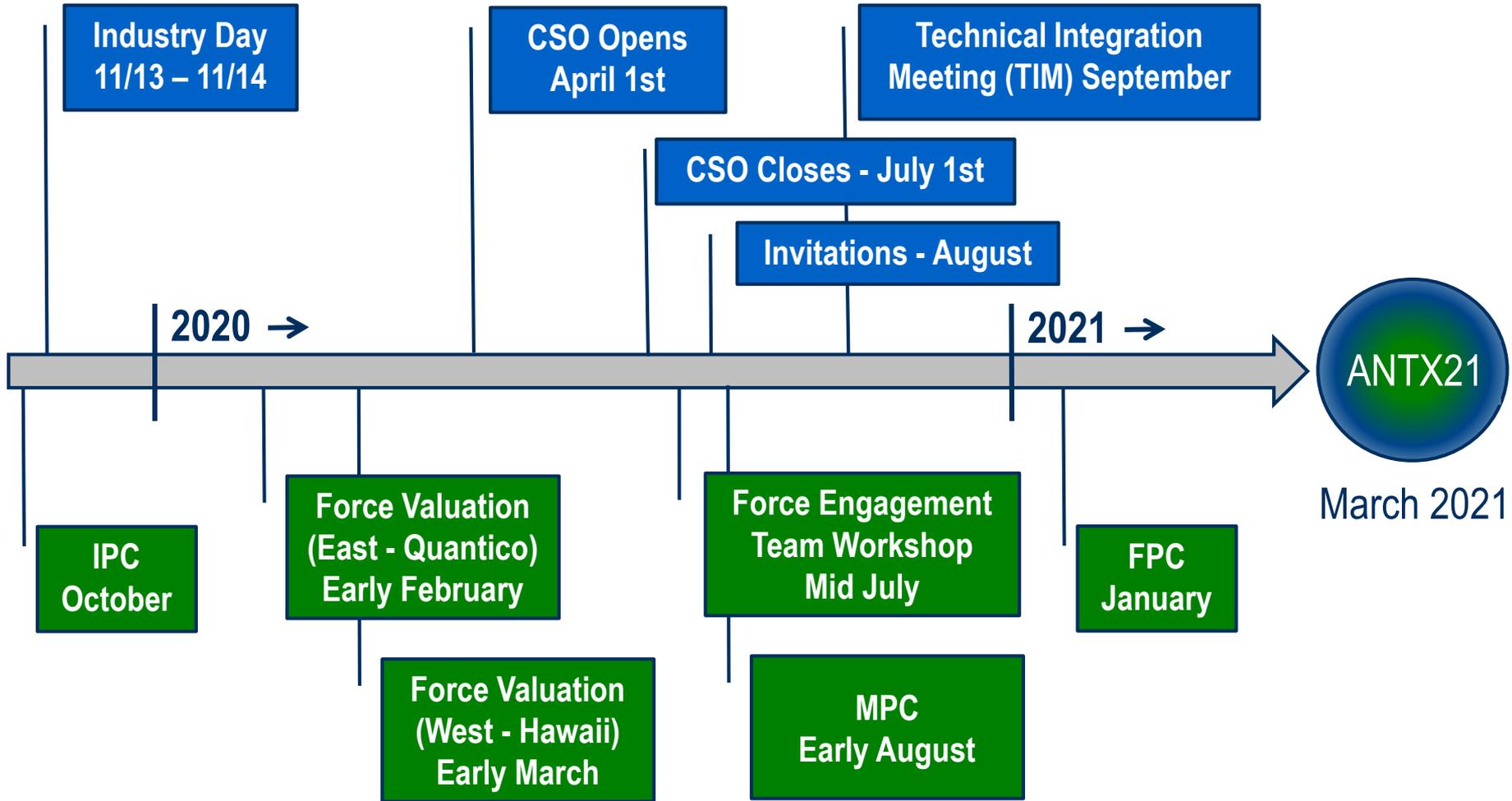
Fight the Naval Force Forward (ANTX West & ANTX East)

- To date (11/13/19) 9 technologies have received funds for further experimentation
- Recommendations for 22 other technologies

Sunday, 30 June	Monday, 1 July	Tuesday, 2 July	Wednesday, 3 July	Thursday, 4 July	Friday, 5 July	Saturday, 6 July
				Holiday Period (Marines Off- except essential personnel)		
Sunday, 7 July	Monday, 8 July	Tuesday, 9 July	Wednesday, 10 July	Thursday, 11 July	Friday, 12 July	Saturday, 13 July
Holiday Period	EXCON Occupy ranges / Site set up	Performer In-Processing / Gear Delivery	Set up / OP check systems Fly / Float / Emit	Individual Assessments		
Exercise ADVON Travel	RSO Class	Food Truck Begins	Assessor Training	EA Ops		
Sunday, 14 July	Monday, 15 July	Tuesday, 16 July	Wednesday, 17 July	Thursday, 18 July	Friday, 19 July	Saturday, 20 July
Flex Day	Mission Threat Assessments			DV Day (P)	DV Day (A)	
	EA Ops		DV Rehearsal	Clear ranges		
		Execution at MCOLF Atlantic		Gear Retrograde		
					Food Truck Ends	
Sunday, 21 July	Monday, 22 July	Tuesday, 23 July	Wednesday, 24 July	Thursday, 25 July	Friday, 26 July	Saturday, 27 July
Final Range Inspection						

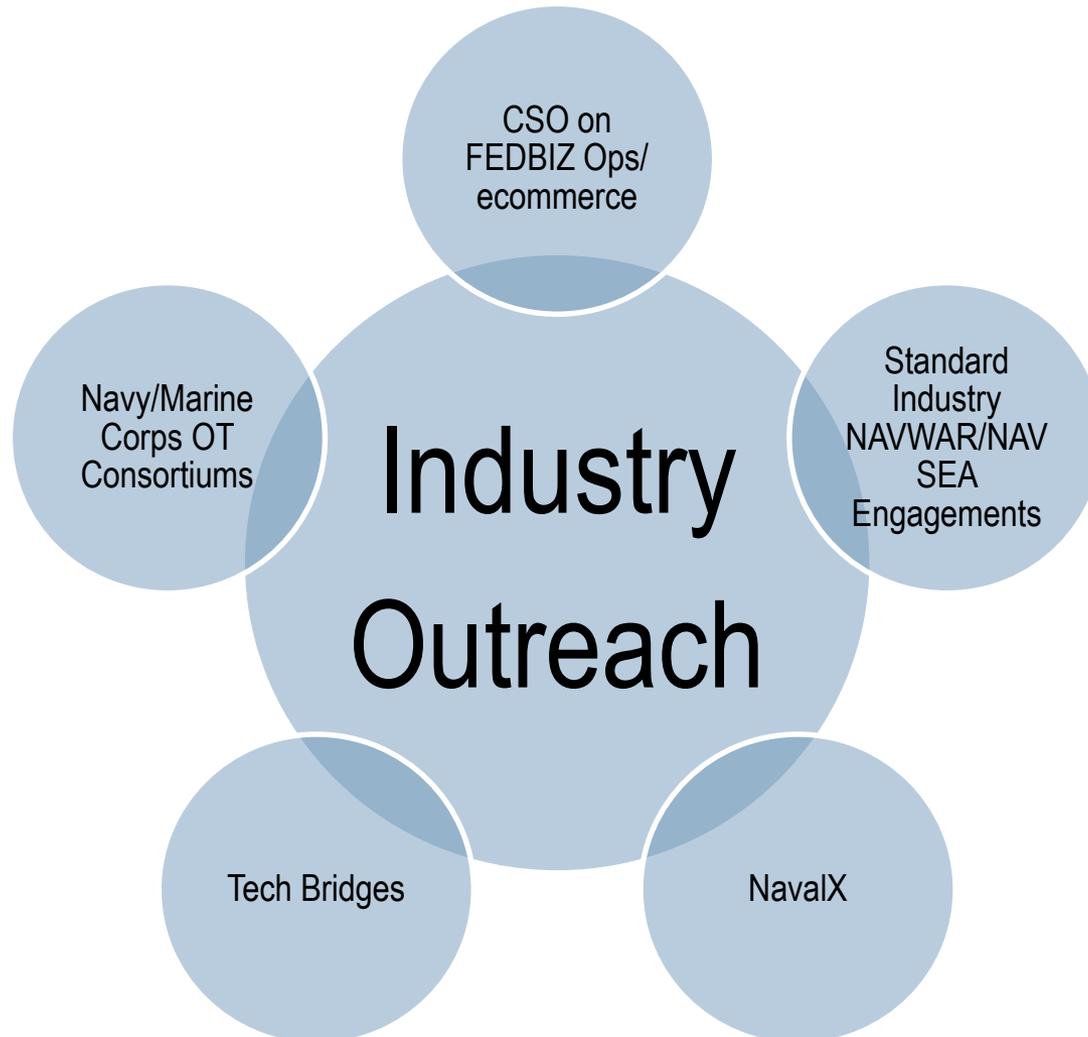
Execute highly valued mission threads with emerging technologies, in Expeditionary Advanced Basing Operations (EABO), Littoral Operations in a Contested Environment (LOCE) and Distributed Maritime Operations (DMO) concepts

Industry and Government Timelines ANTX 21

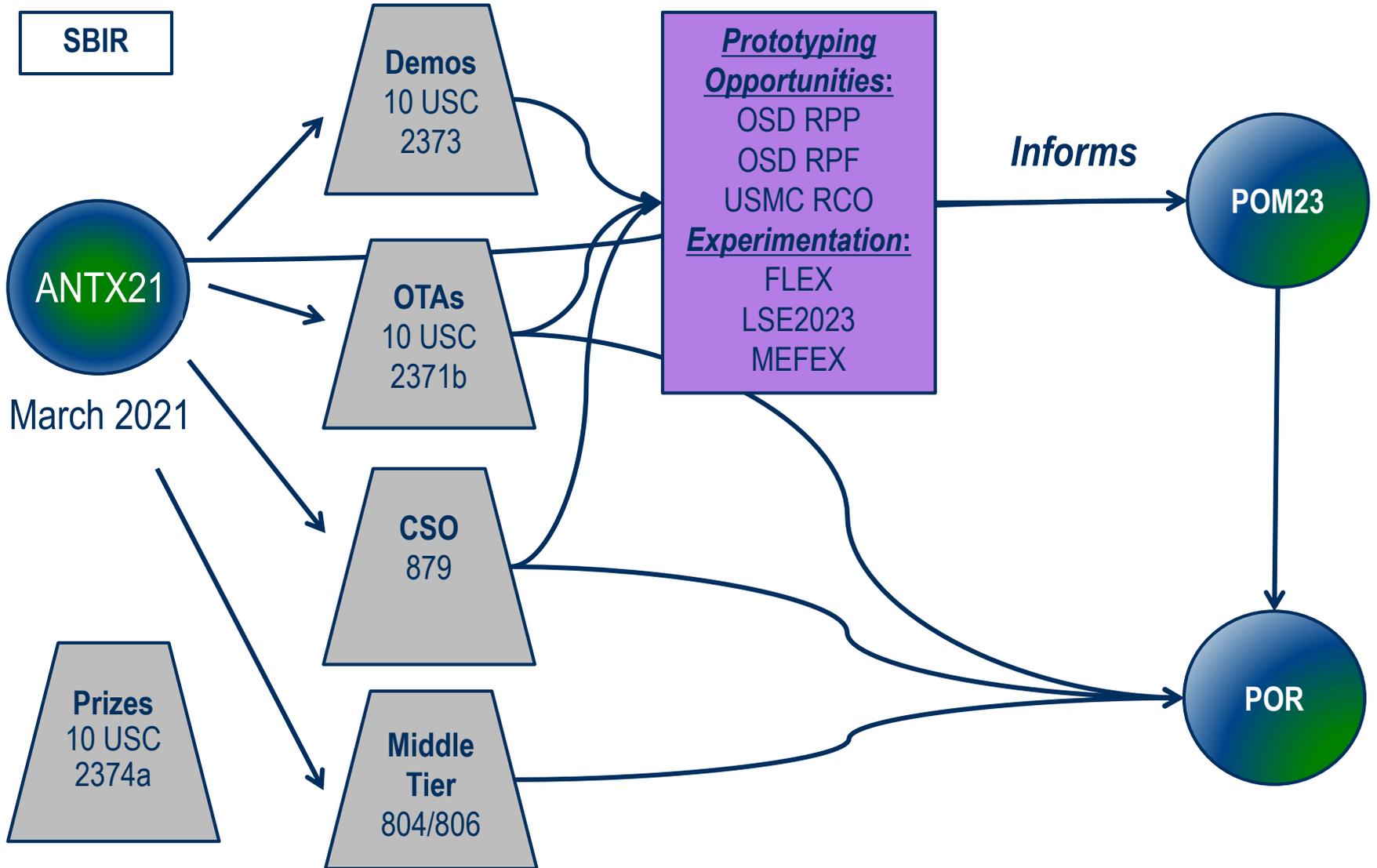


Dates subject to some fluctuation

Planned Outreach



Post ANTX Contracting



Value Proposition

- ▼ Demonstrate potential of technology in new Operational Concepts (DMO, EABO)
- ▼ Fleet Engagement
 - Direct feedback from active duty marines and sailors
- ▼ Exposure
 - USMC — MCSC, CD&I, MCWL
 - USN — NWDC, OPNAV
- ▼ Range Access
 - Conducted at USMC/USN ranges
- ▼ Transition Potential
 - Commercial Solutions Opening & Variety of new authorities



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)

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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.public.navy.mil/navwar/Atlantic/Pages/ForIndustry.aspx>

NAVWAR Contract Directorate Office: <https://e-commerce.sscno.nmci.navy.mil>