



Coastal Trident 2021

Port and Maritime Security Program



In the summer of 2021, the Naval Surface Warfare's (NSWC) Port Hueneme Division (PHD) will conduct the fifteenth-annual Coastal Trident Port and Maritime Security Program.

PROGRAM BACKGROUND

Coastal Trident is an operational research program conducted to advance the state of the art in countering threats to port and maritime security and the global operations of naval forces.

Coastal Trident is conducted as a combination of scenario-based training, technical demonstration, field experimentation, and exercise activities designed to:

- Reinforce federal, state, local government, and private sector strategic partnerships
- Improve individual and unit proficiency and strengthen existing plans and operational capabilities
- Evaluate and accelerate implementation of developing and transitional technologies
- Identify priorities for improvement to close operational and technical gaps

Coastal Trident is widely recognized as one of the largest and most influential port and maritime security programs in the nation and regularly involves the participation of more than 150 public and private sector organizations.

COASTAL TRIDENT 2021

Coastal Trident 2021 (CT-21) will be conducted to examine the operational and technical capabilities of port and maritime security organizations to counter asymmetric threats to the U.S. Marine Transportation Systems (MTS) and its associated personnel, operations, and critical infrastructure.

The program is designed to meet the needs of a diverse set of stakeholder and participant organizations and emphasizes a “whole of society” strategy for port and maritime security, facilitating public and private sector collaboration and innovation.

CT-21 activities will be focused on the following priority areas of research:

- Operational responses to major port and maritime incidents
- Port security and critical infrastructure protection capabilities
- Unmanned systems applications and countermeasures
- Maritime domain awareness and information dominance

PLANNING AND EXECUTION MILESTONES

Concept Development Meeting
November 18, 2020

Project Proposals Due
January 13, 2021

Initial Planning Meeting
January 20, 2021

Mid-term Planning Meeting
March 3, 2021

Final Planning Meeting
April 14, 2021

Program Execution
June and July, 2021

After Action Conference and Open House
July 28, 2021



Coastal Trident 2013



Coastal Trident 2014



Coastal Trident 2018



Coastal Trident 2017



Coastal Trident 2013

PROGRAM ALIGNMENT

CT-21 will support NSWC PHD's Advanced Naval Technology Exercise (ANTX), an experimentation program intended to accelerate development and evaluation of technologies to "expand the advantage" of the naval warfighter.

ANTX-Coastal Trident focus areas for 2021 will include:

- In-service engineering, maintenance, and supportability capabilities
- Sensor data fusion, maritime communications, and decision support tools
- Multi-spectral imaging, augmented/virtual reality models, and digital engineering
- Unmanned systems applications and countermeasures

FATHOMWERX, the NavalX Ventura Tech Bridge, will facilitate additional engagement of technology during CT-21.

Technical demonstrations and field experiments conducted during CT-21 will:

- Provide a venue for local, state, and non-DOD federal organizations to leverage science and technology (S&T) and research and development (R&D) resources
- Provide access for small businesses and low-technology readiness level (TRL) technologies to operational stakeholders in port and maritime security

CT-21 will support training and exercise activities by operational stakeholders in port and maritime security. These activities will provide opportunities to evaluate capabilities and identify areas for improvement.

Training and exercise activities conducted during CT-21 will focus on:

- Satisfaction of annual requirements for training and exercises by the Port of Hueneme and other regional stakeholders
- Detection and recognition of asymmetric threats to port and maritime security
- Identification and coordination of local, regional, and national-level capabilities to address threat scenarios
- Planning and execution of effective operations in the port and maritime domains

PROGRAM PARTICIPANTS

Participation in Coastal Trident is routinely represented by the following types of organizations:

Federal Government

- Navy and Joint-DoD organizations
- Lead federal agencies and specialized response organizations
- Science & technology organizations
- Port and maritime security stakeholders

State and Local Government

- First responder and specialized response organizations
- Port and maritime security stakeholders
- Port authorities and special districts
- Academic research centers and laboratories

Private Sector

- Technology developers and subject matter experts
- Port and maritime operations and security stakeholders
- Academic research centers and laboratories



Coastal Trident 2019



Coastal Trident 2014

AREA OF OPERATIONS

Coastal Trident is typically conducted at waterside and offshore venues throughout Southern California, across an area of operations that spans more than 200 coastal miles and extends offshore, clear of congested shipping lanes and recreation areas.



PROGRAM RESOURCES

The Coastal Trident planning team leverages unique access to resources throughout its area of operations in order to establish robust and relevant learning environments to support training, technical demonstration, field experimentation, and exercise activities.

These resources enable the planning team to design diverse, realistic, and challenging scenarios in which participants can increase proficiency, evaluate capabilities, identify priorities for improvement, and include:



- Waterside facilities at the Ports of Hueneme, Los Angeles, Long Beach, and San Diego
- Test ranges at Naval Base Ventura County and Naval Base Point Loma
- Offshore oil and gas platforms
- Target and support vessels representative of military, commercial, and recreational surface craft
- Manned and unmanned platforms, capable of hosting sensor systems or documenting program activities
- Opposing forces personnel, hazardous materials simulators, and threat-representative unmanned systems
- End users representing federal, state, and local government operational communities
- Technology base of subject matter experts capable of meeting operational needs with technical solutions

POINTS OF CONTACT

Coastal Trident and ANTX-Coastal Trident activities are planned and conducted by NSWC PHD's Office of Technology, in partnership with the Port of Hueneme and FATHOMWERX.



For additional information about the program, please contact the Principal Investigator:

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Coastal Trident 2019