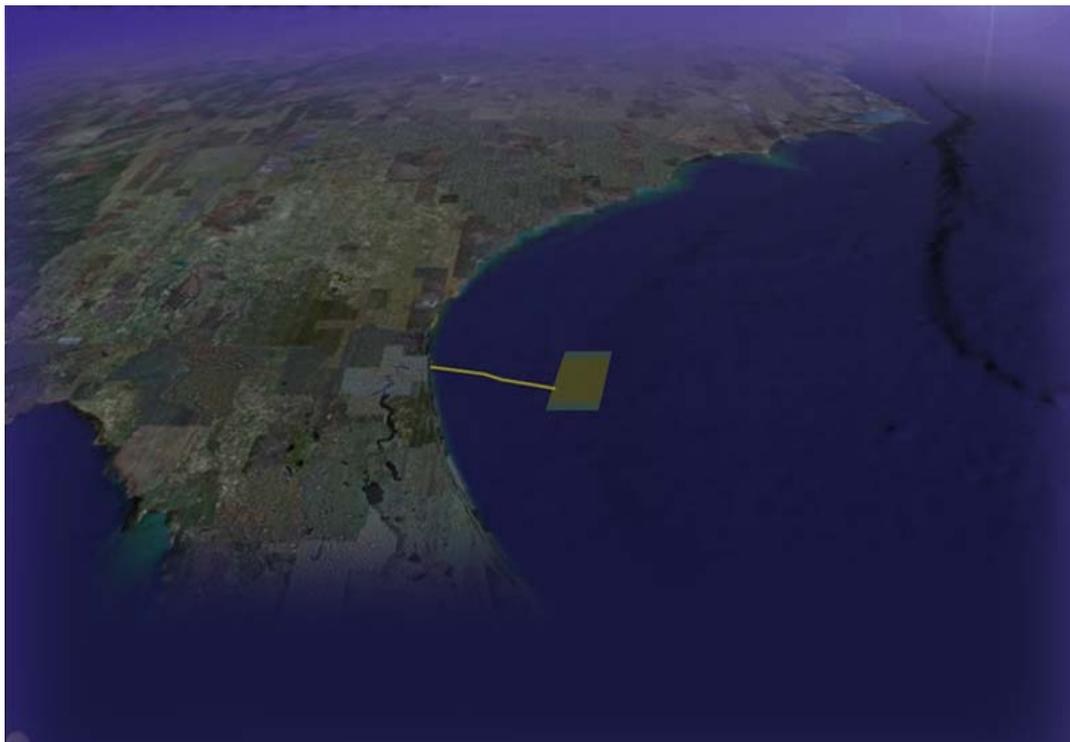


Undersea Warfare Training Range - USWTR EAST COAST-



**INDUSTRY DAY BRIEF
5 MAY 2010**



PRESENTATION TOPICS



Introduction / Overview – LCDR Charles Kubic

Contracts / PCO – Mr. William Hurley

Technical Program – Mr. John Visneuski



INTRODUCTION / OVERVIEW

All information is pre-decisional and may be subject to change.

PARTICIPATION GUIDANCE

- **Hold questions to the end of each presenter's segment.**
- **All questions will be noted but some may not be answered directly.**
- **All questions and answers will be provided within two weeks via link published in FEDBIZOPS.**
- **FEDBIZOPS link will also provide this presentation.**

Presentation Purpose

- Provide familiarization with planned RFP.
- Purpose of briefing is not to provide sufficient engineering and contract details for system design.
- All information passed is pre-decisional and is subject to change.

Program Limitations

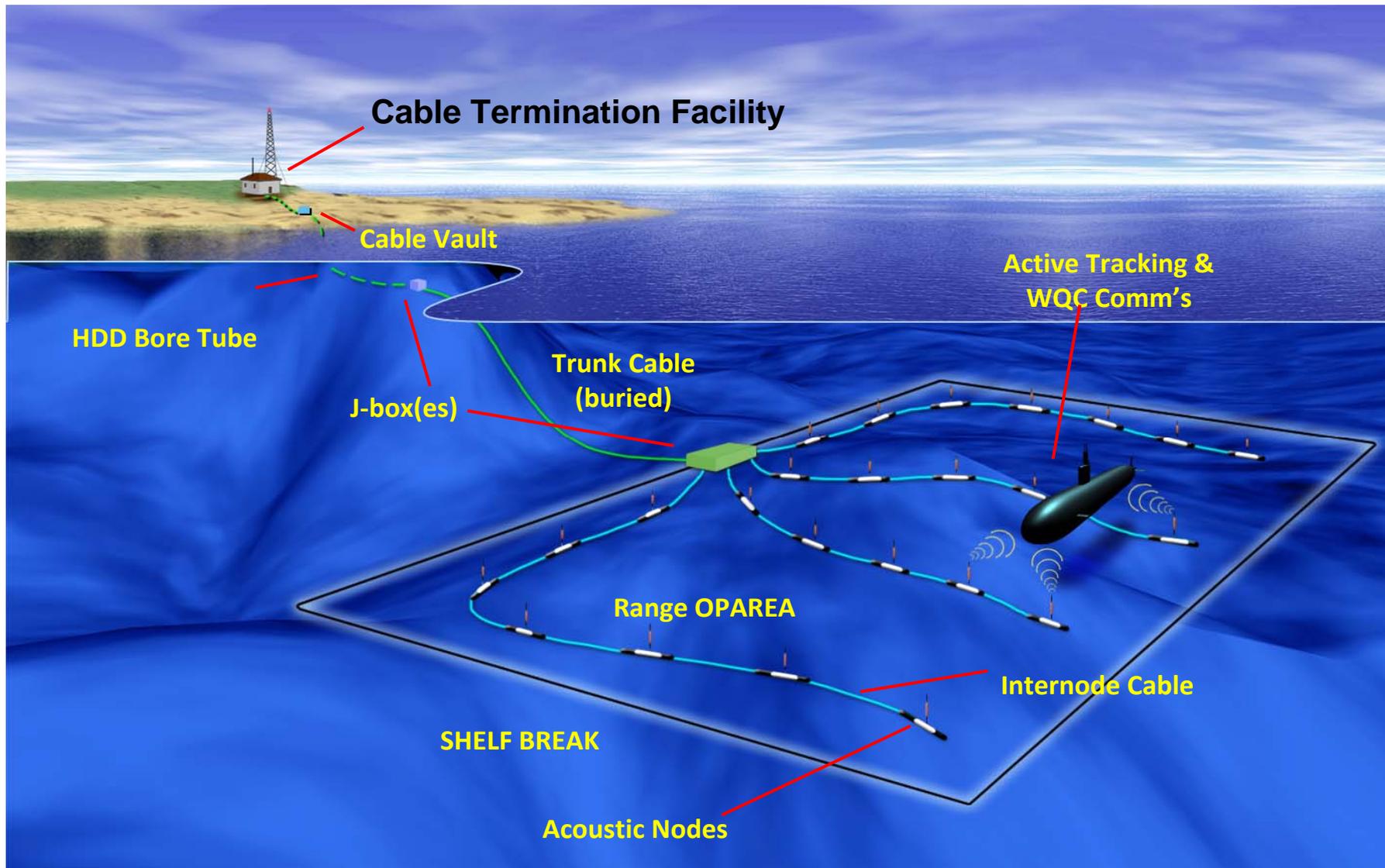
- The USWTR East Coast Program is limited to the production and installation of an undersea tracking range off the coast of Florida.
- Limited range infrastructure and operational support services exists at either Mayport NS or Jacksonville NAS
 - New range support infrastructure will be addressed in separate RFPs
 - Operational support needs will be addressed in the future under separate support contracts

USWTR-EC Overview

- **Program Description:**

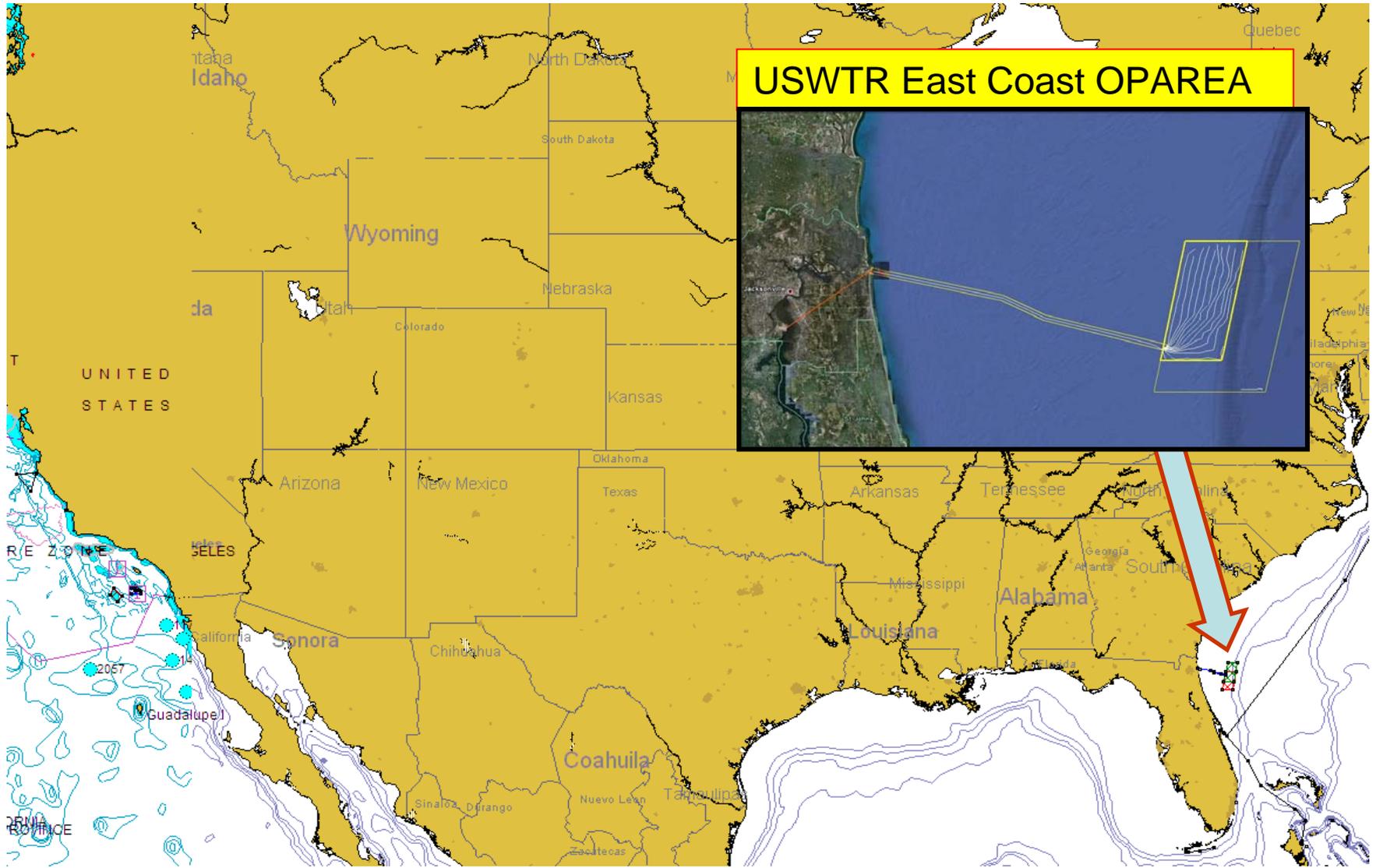
- New instrumented undersea tracking range similar in function to AUTECH and SCORE but for littoral waters.
- 500 square nautical miles of coverage in two phases:
 - Phase 1: 200 SNM
 - Phase 2: 300 SNM
- Real-time tracking of participants to evaluate tactics, proficiency and readiness.
- Replicate USW threat areas to provide a realistic training environment.
- Improve ASW training effectiveness for Fleet Forces.

USWTR(EC)JAX In-Water Subsystems Configuration



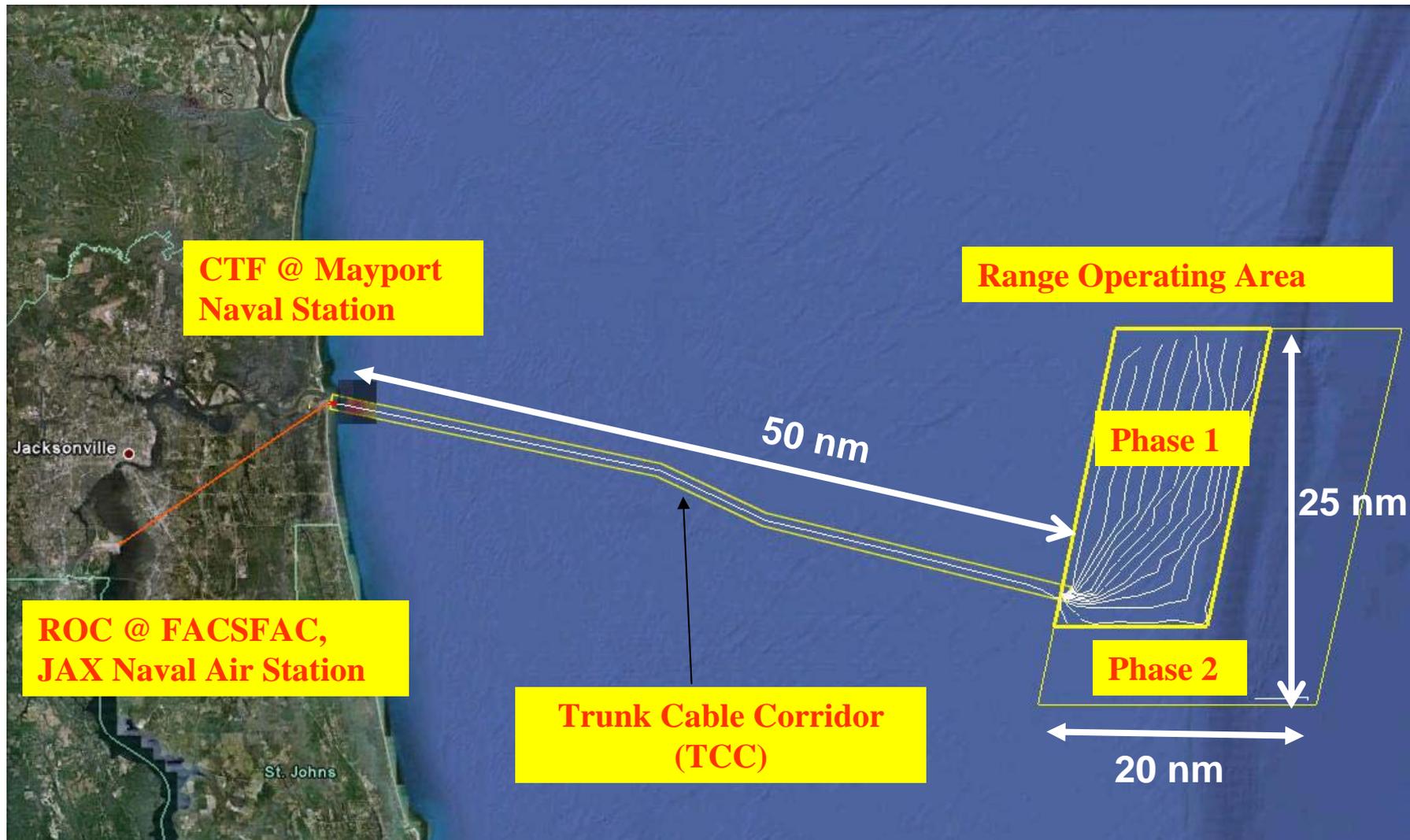
All information is pre-decisional and may be subject to change.

USWTR East Coast Location



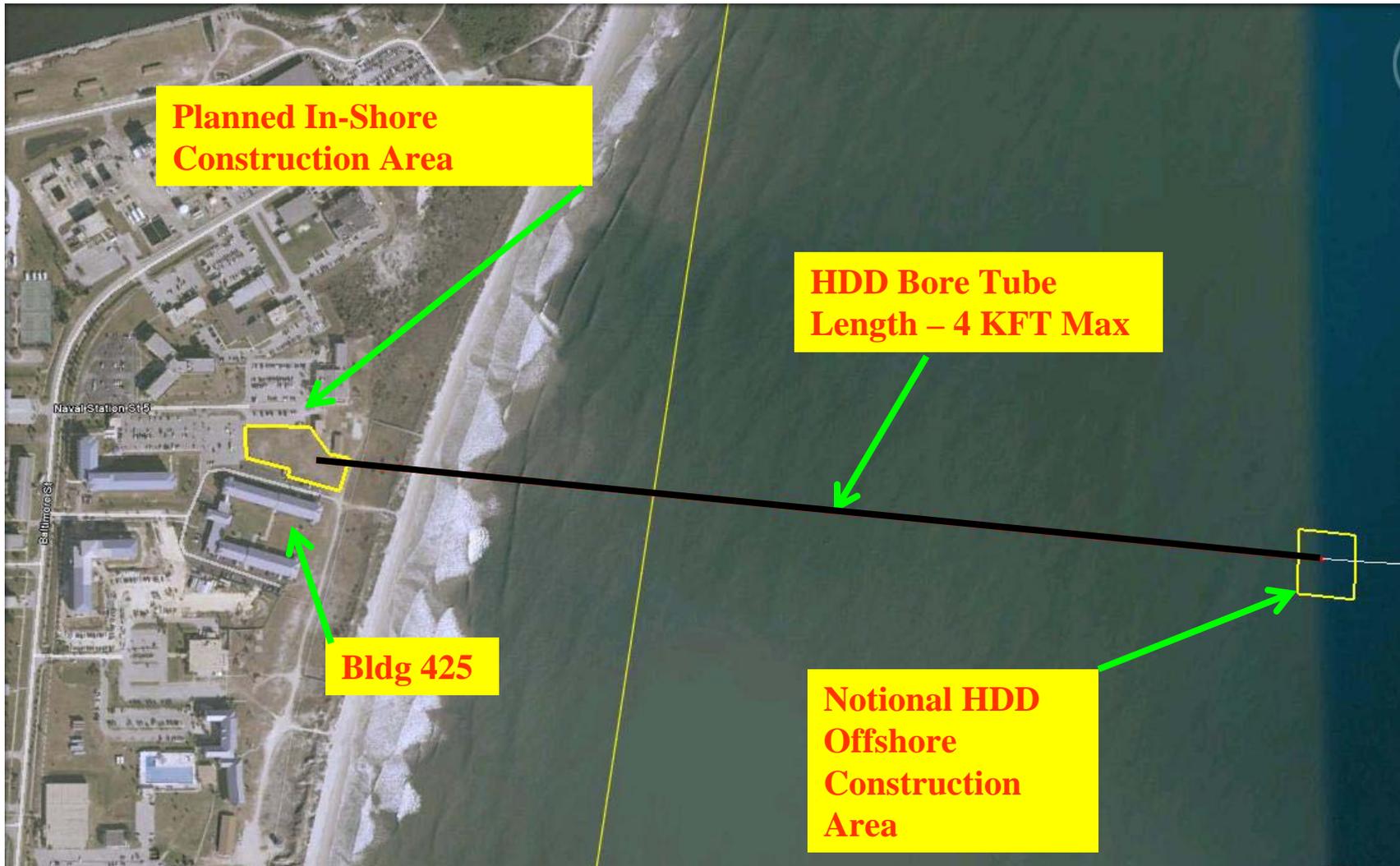
All information is pre-decisional and may be subject to change.

USWTR(EC)JAX Perimeter



All information is pre-decisional and may be subject to change.

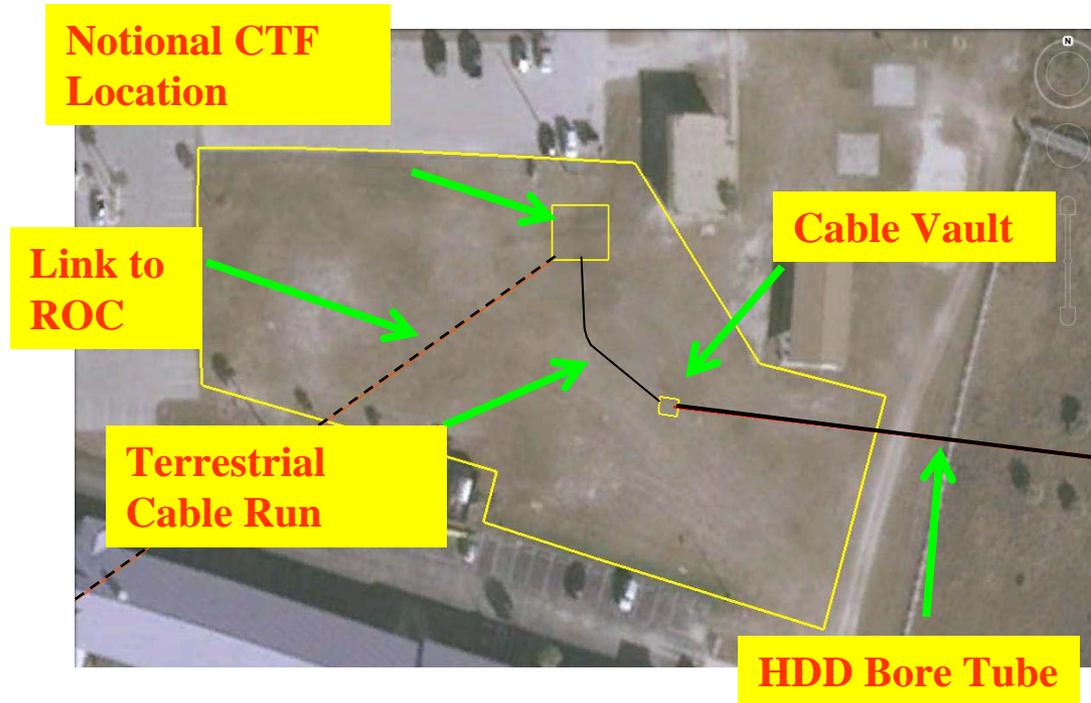
USWTR(EC)JAX Notional Sea Shore Interface



All information is pre-decisional and may be subject to change.

CTF Location

CTF Location within HDD area



1. Trunk cable may be pulled thru terrestrial conduit to CTF.
2. Power and signal processing in one building.
3. Short cable/conduit run to cable vault.
4. No termination in the vault required.

CTF location: New Government Construction located within HDD site.



CONTRACTS / PCO

All information is pre-decisional and may be subject to change.



Procurement Contracting Office



Contracting Agency: NUWC DIVNPT

Procurement Type: Open, Competitive, Best Value

Basic: Phase 1 Option: Phase 2

Firm Fixed Price - Program Management, Engineering, Pre-Production Engineering and Fabrication, Acquisition of Long Lead Time items, Production of Hardware, and In-Water System Testing.

Cost Plus Fixed Fee - Subsystems Installation, Installation Vessel, Training and Tech Support.



Procurement Contracting Office



Anticipated Release of the Request For Proposals
– September/October 2010

Announcement – Federal Business Opportunities

Proposal Response Time - 45 to 60 calendar days

PCO - Mr. William Hurley
B. 11
NUWC Division Newport
Newport, RI 02841

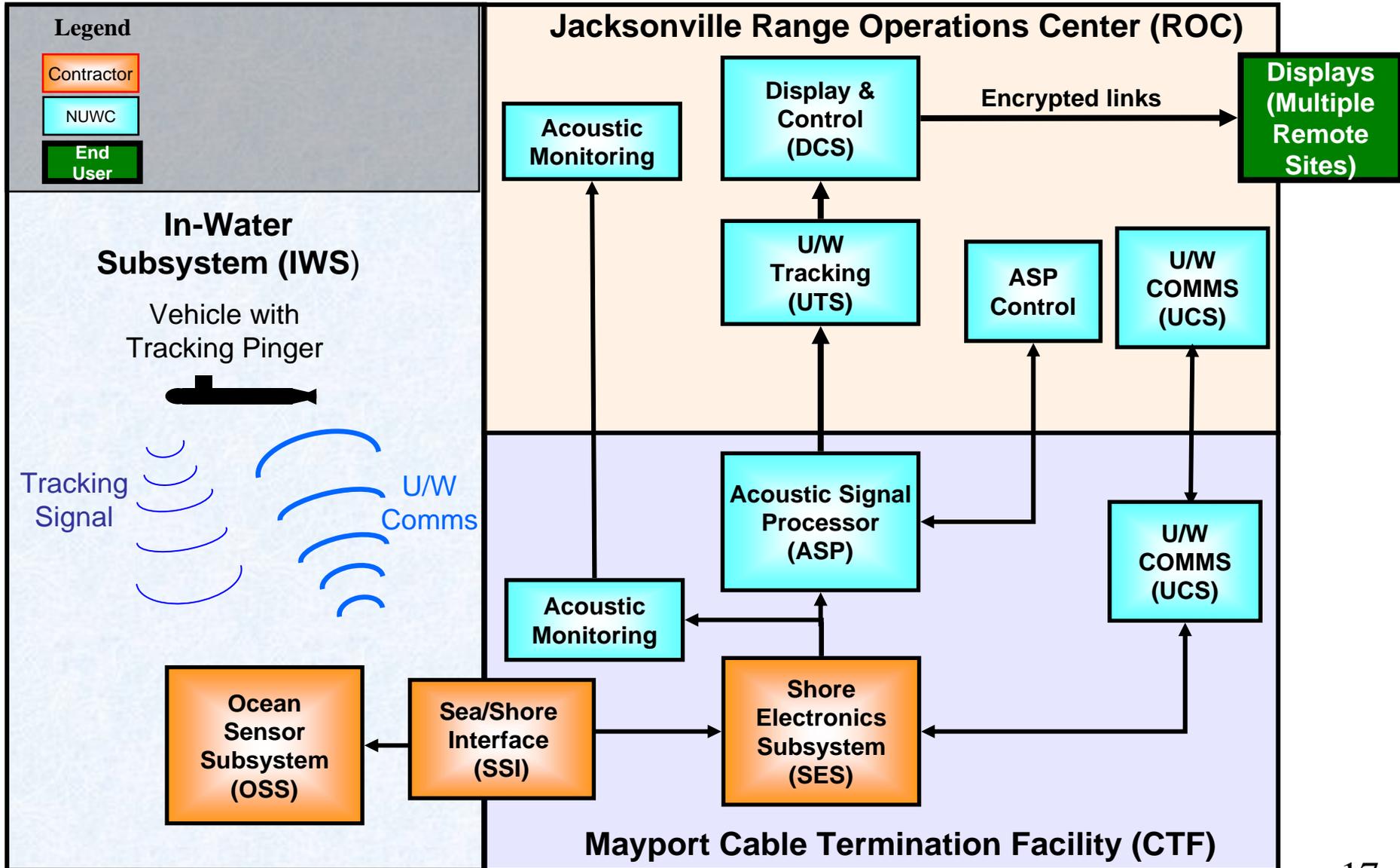
401-832-1571
william.hurley@navy.mil



TECHNICAL PROGRAM

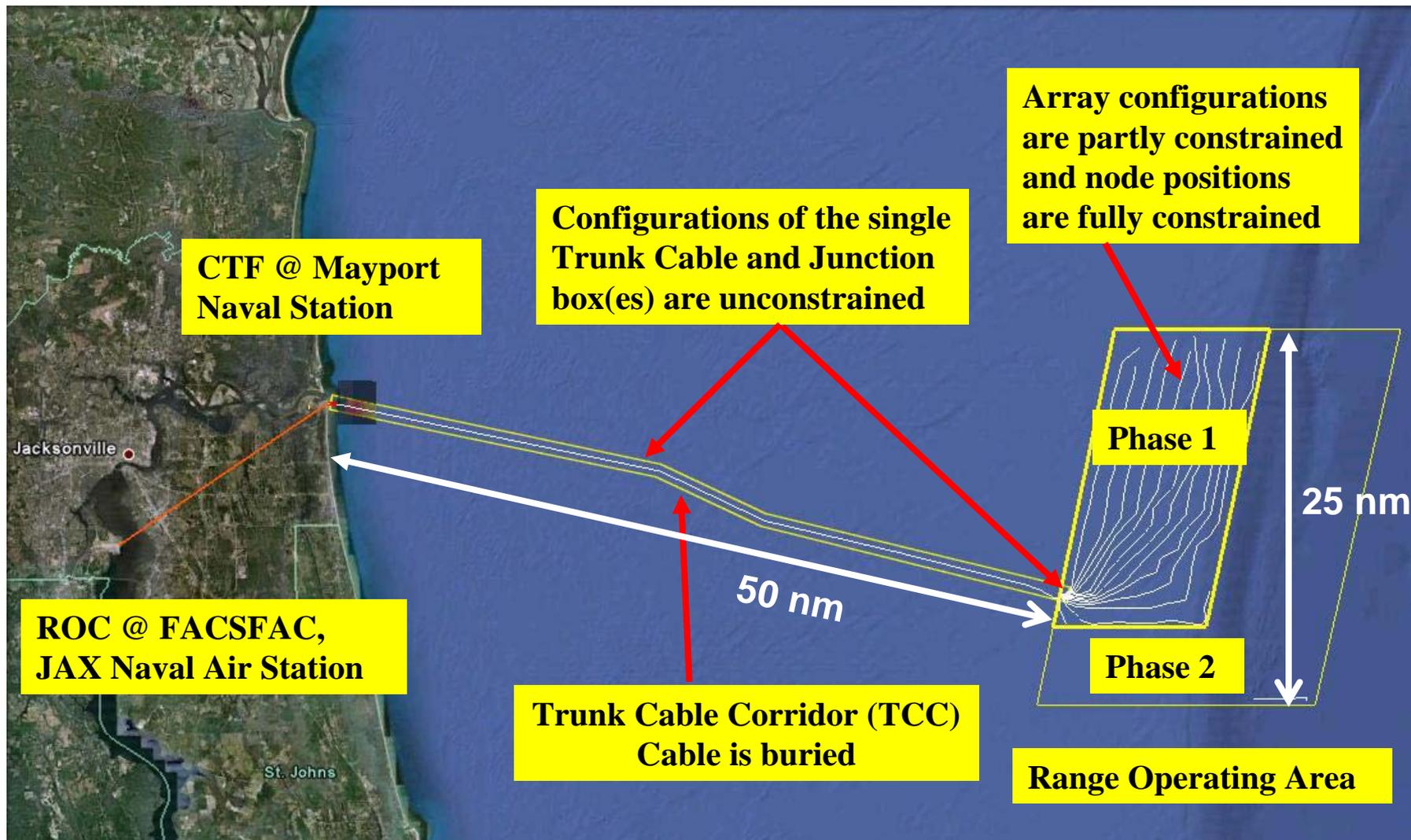
All information is pre-decisional and may be subject to change.

USWTR East Coast Preliminary Subsystem Block Diagram



All information is pre-decisional and may be subject to change.

USWTR(EC)JAX Configuration



All information is pre-decisional and may be subject to change.

IWS Contractor Products and Services Phase 1

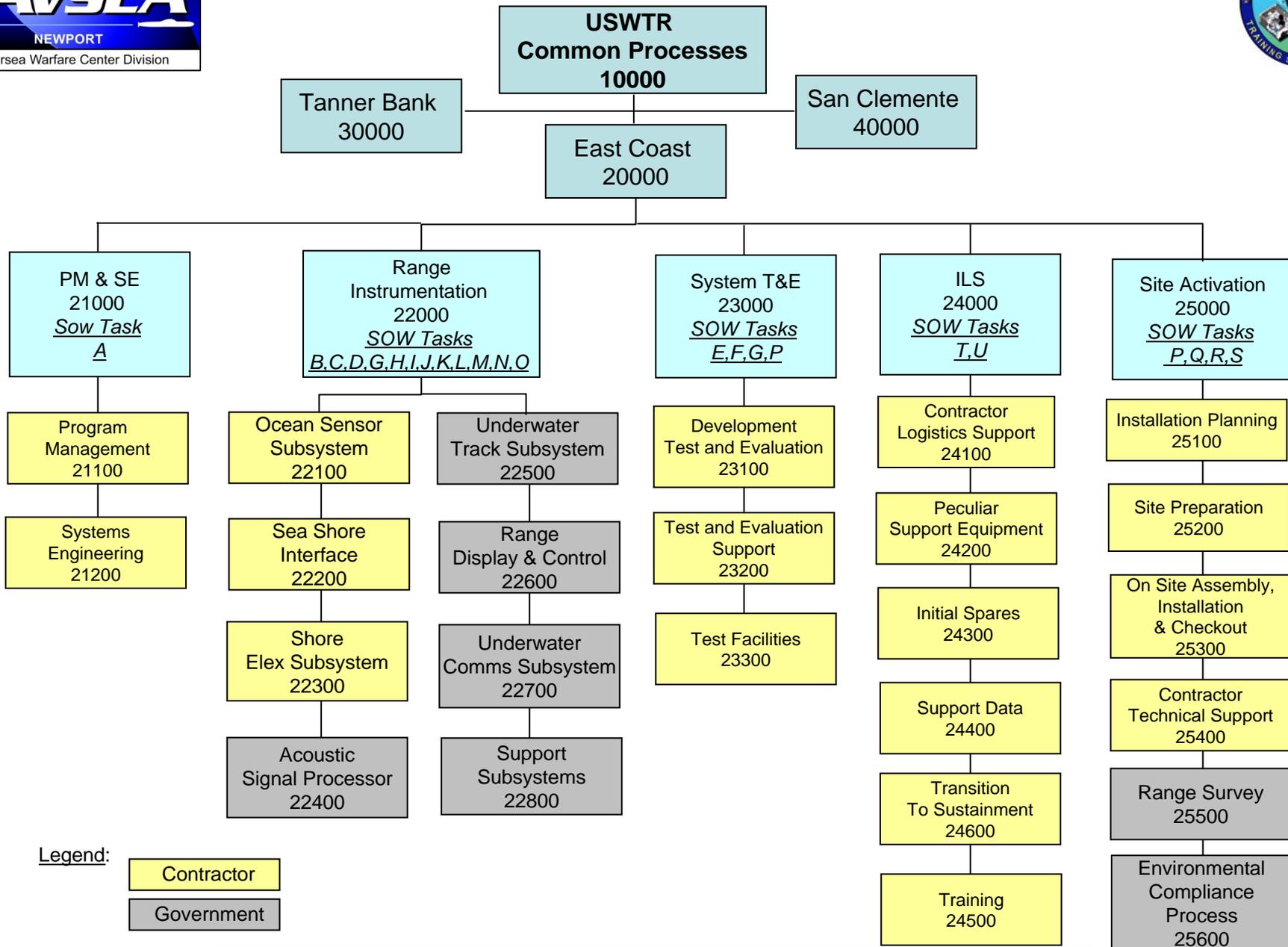
- **Ocean Sensor Subsystem (OSS)**
 - **Estimated: 150 receive nodes, 20 High Band bidirectional nodes, and 3 Low Band bidirectional nodes on ≥ 10 strings**
- **Shore Electronics Subsystem (SES)**
 - **Interface to Ocean Sensor Subsystem (OSS)**
- **Sea-Shore Interface (SSI)**
 - **Horizontal Directional Drilling**
 - **Trunk Cable**
 - **Junction Box(es)**
- **OSS installation**
 - **Survivable Nodes**
 - **Internode Cable**
- **Other**
 - **Training**
 - **Documentation**
 - **Spares Recommendations**

IWS Contractor Products and Services Phase 2

- **Ocean Sensor Subsystem (OSS)**
 - **Estimated: 100 receive nodes, 20 High Band bidirectional nodes, and 6 Low Band bidirectional nodes on ≥ 10 strings**
- **Shore Electronics Subsystem (SES)**
 - **Phase 2 may be N/A***
- **Sea-Shore Interface (SSI)**
 - **Junction Box modifications***
- **OSS installation**
 - **Survivable Nodes**
 - **Internode Cable**
- **Other**
 - **Training**
 - **Documentation**
 - **Spares Recommendations**

** Dependent on Phase 1 design*

Preliminary Work Breakdown Structure



All information is pre-decisional and may be subject to change.

USWTR-EC Statement of Work (SOW) Tasks



TASK ID	TASK NAME	CONTRACT TYPE	JAX1	JAX2
A	Program Mgmt/SE	FFP	X	X
B	OSS Engineering	FFP	X	
C	SSI Engineering	FFP	X	
D	SES Engineering	FFP	X	
E	OSS Pre-Production	FFP	X	
F	SES Pre-production	FFP	X	
G	Trunk Cable	FFP	X	
H	Internode Cables	FFP	X	X
I	Cable Terminations	FFP	X	X
J	OSS Procurement	FFP	X	X
K	SSI Procurement	FFP	X	X

All information is pre-decisional and may be subject to change.

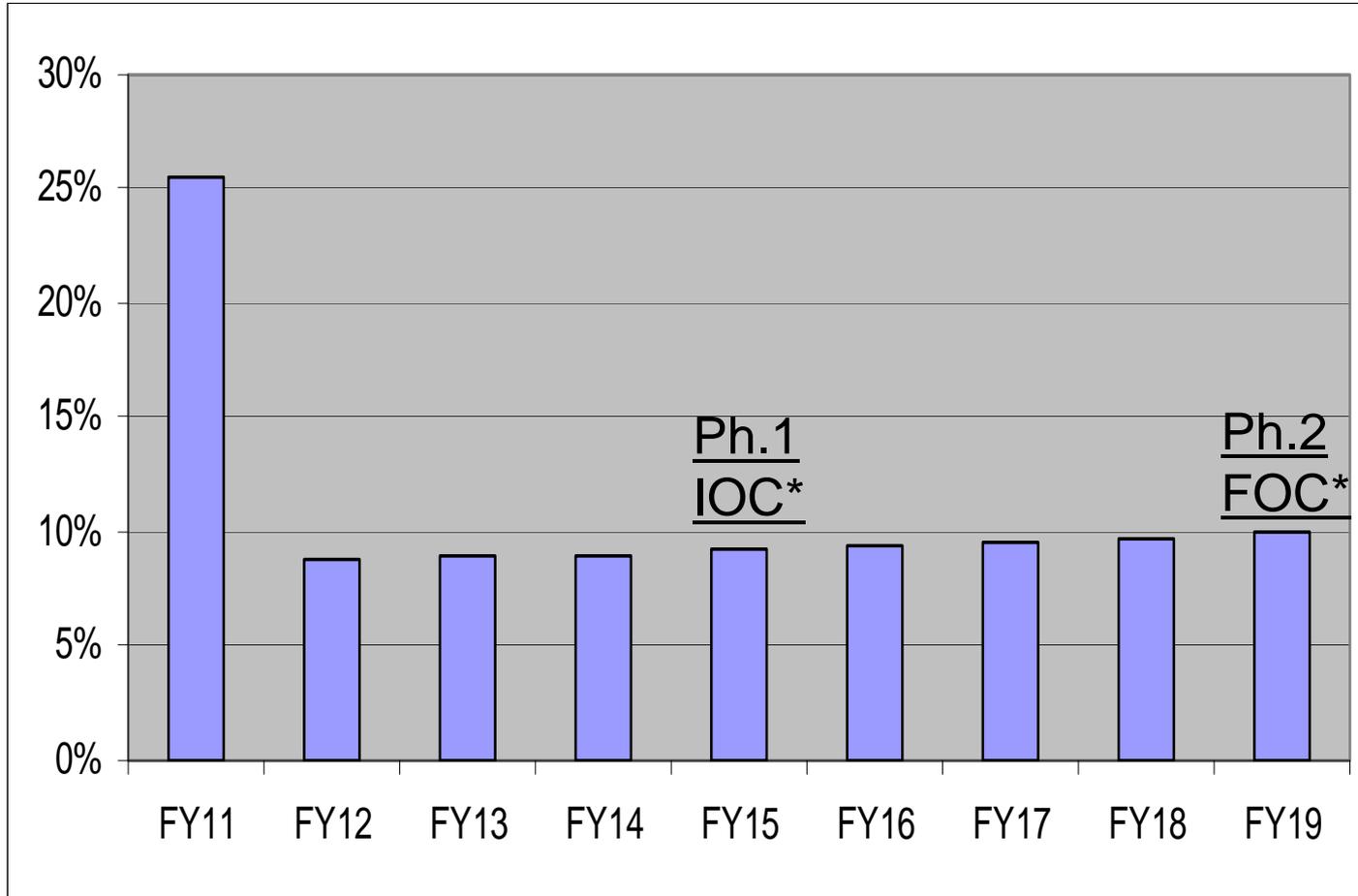
USWTR-EC Statement of Work (SOW) Tasks Cont'd



TASK ID	TASK NAME	CONTRACT TYPE	JAX1	JAX2
L	SES Procurement	FFP	X	
M	OSS Production	FFP	X	X
N	SSI Production	FFP	X	X
O	SES Production	FFP	X	
P	IWS Testing	FFP	X	X
Q	SSI Installation	CPEF	X	X
R	Mini-String Installation	CPEF	X	
S	OSS & SES Installation	CPEF	X	X
T	Training	CPEF	X	X
U	Tech Support	CPEF	X	X

All information is pre-decisional and may be subject to change.

USWTR Funding Distribution by FY



* Government projection

Systems Engineering Technical Reviews (SETR)

Formal Reviews to be conducted for USWTR per –

NAVAIR INSTRUCTION 4355.19D

“Systems Engineering Technical Review (SETR) Process”

USWTR Engineering Studies

Area of Study	Effort and Status
High Resolution Bathymetry	TCC and Range OPAREA Bathymetric Surveys - to be provided as GFI at award only.
Identification of Fishing Threats	Bottom Contact Fisheries Study – Summary will be provided in RFP.
Protected Node Technologies	Small Business Innovative Research - Phase 1 completed.

High Resolution Bathymetry Surveys

- Full coverage using multi-beam sonar
- Sediment grabs and video of selected areas

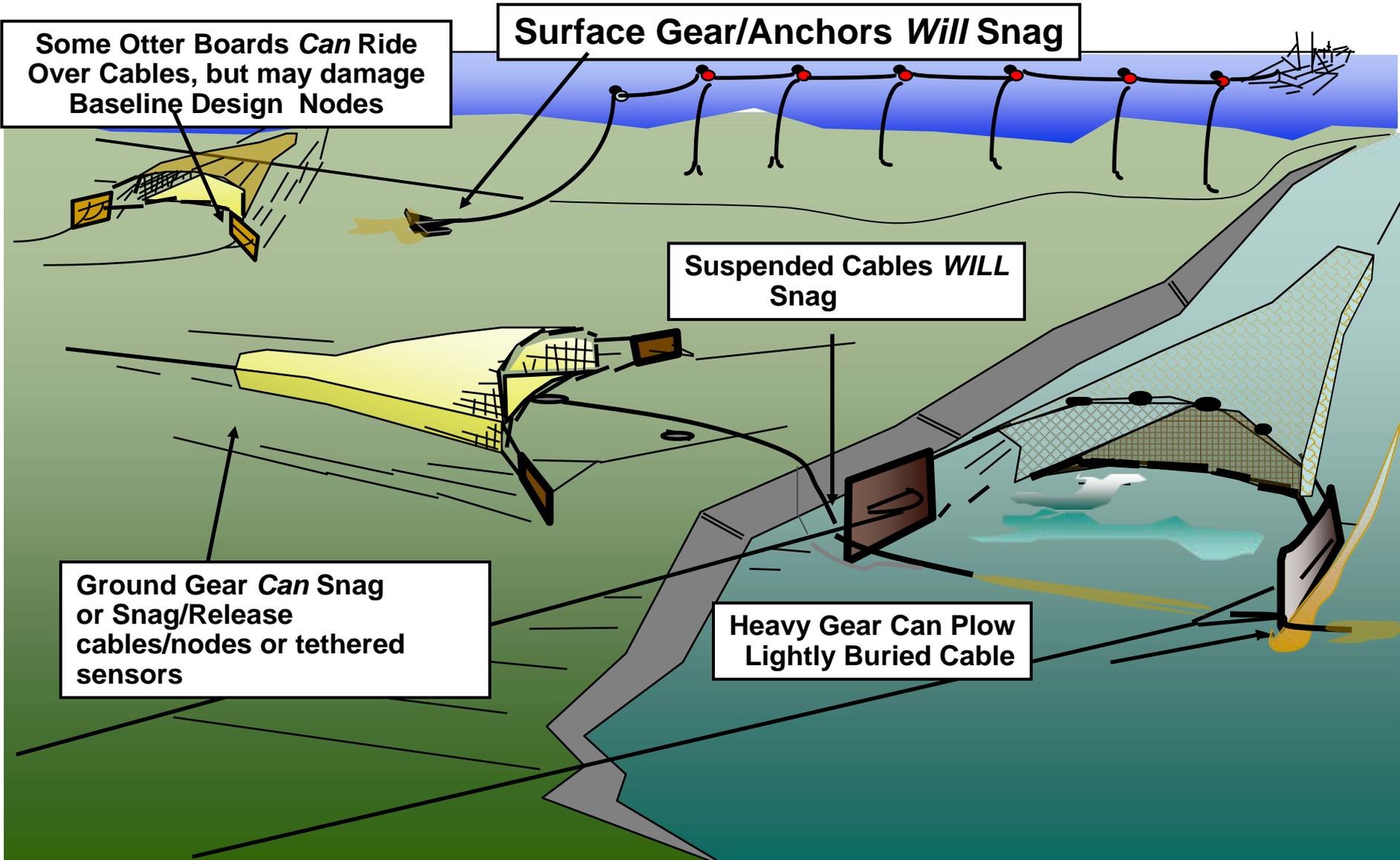


Fishing Threats

BOTTOM-CONTACT GEAR TYPE

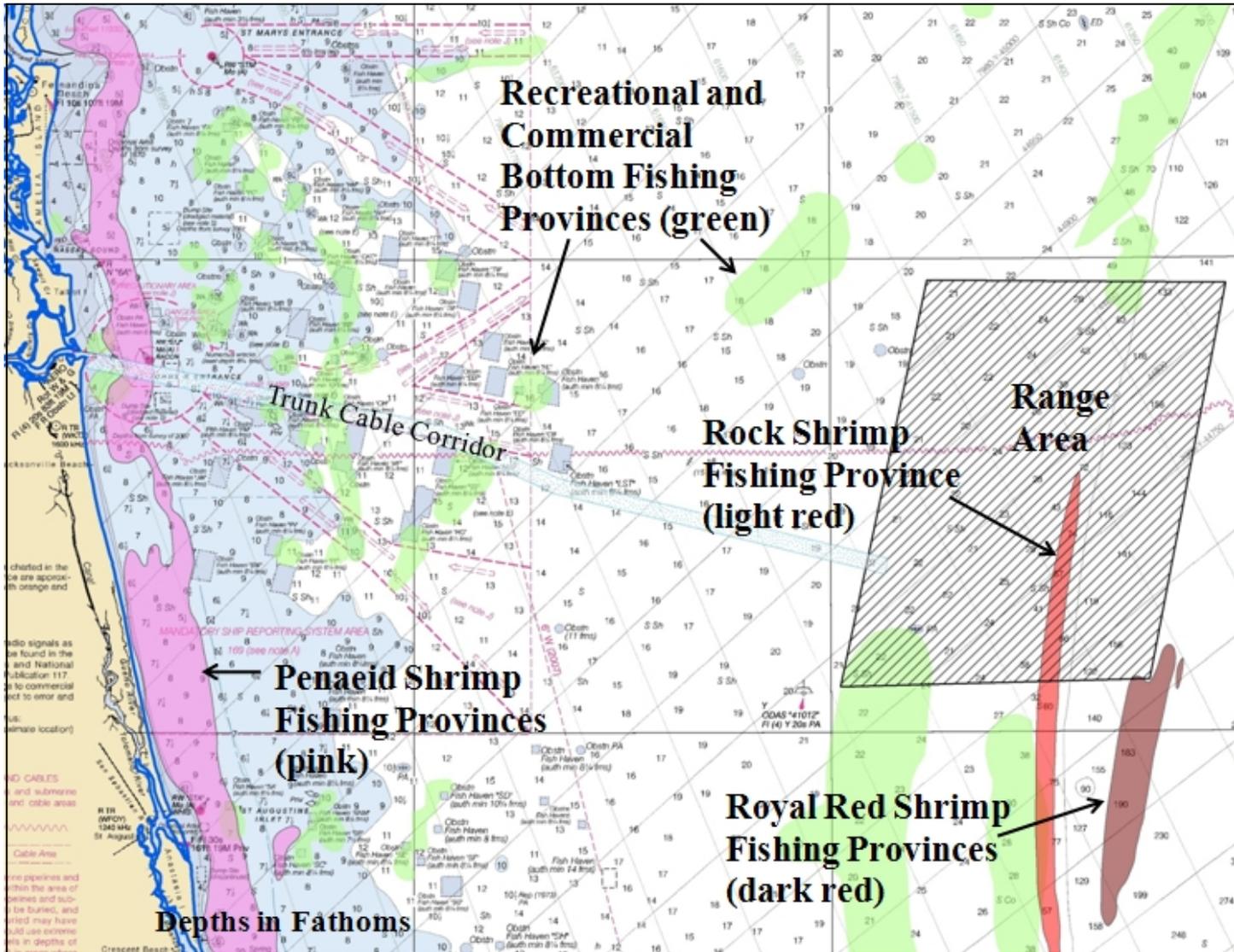
- **Limited variety of fishing gear designs used**
- **Trawl doors – standard wood and metal types**
- **Trawl foot rope (sweep) – all rigs are bare chain**
- **Anchors (recreational boats and commercial)**
- **No traps used**

Interactions with Seafloor Cable/Nodes



All information is pre-decisional and may be subject to change.

Statistical Data for Commercial Shrimp and Recreational Fisheries off Jacksonville



All information is pre-decisional and may be subject to change.

Small Business Innovative Research Protected Node Technology

Objective: Research node and sensor survivability against trawls, anchors, high current, and bio-fouling while retaining acoustic performance and deployability.

Phase 1 Participants

- **Applied Physical Sciences Corp.**
- **Progeny Systems Corp.**
- **SkySight Technologies, LLC**

USWTR-EC Survivability

FOCUS AREAS:

- Operating life of 20 years for the Ocean Sensor System without maintenance.
- Methods for selecting the trunk and internode cables.
- Techniques for cable termination.
- Considerations for bio-fouling and high water currents.
- Protective enclosures / housings for nodes.
- Methods for cable and junction box protection (e.g., burial or armoring).
- Technological maturity of the proposed design.

USWTR Technology Maturity

- A Technology Maturity Self-Assessment (TMSA) of the proposed solution for technology readiness is required.
- A TMSA Technical Work Breakdown Structure (TWBS) spreadsheet is also required.
- TRL > 7 is required prior to contract award.
- TRL of 7 is defined as: System prototype demonstration in an operational environment
- References:
 - **DOD Technology Readiness Assessment (TRA) Deskbook, JUL 09**
 - **NAVAIRINST 3910.1 of 21 Oct 09, TRA Process**



END