

# U.S. Coast Guard Navigation Center



Homeland  
Security

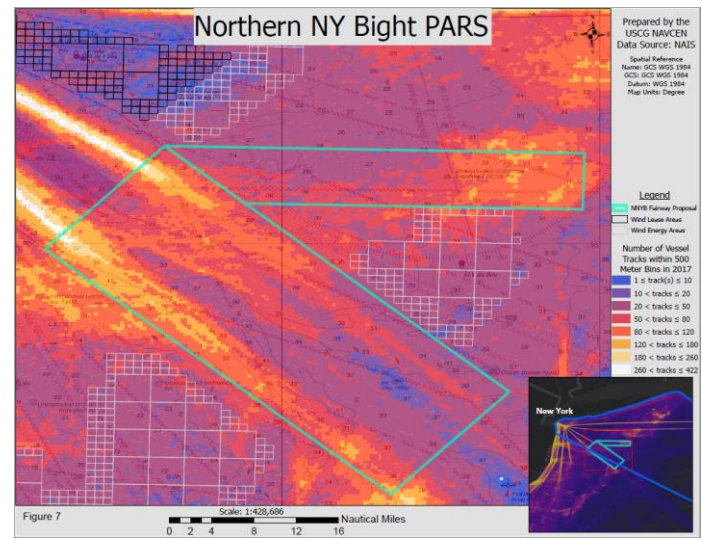
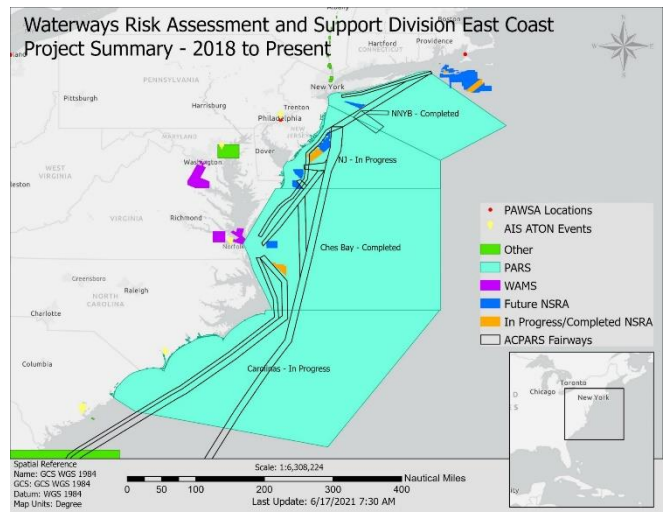
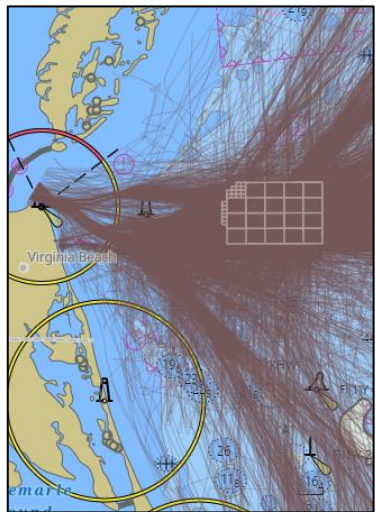
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Homeland Security*  
**United States  
Coast Guard**





# U.S. Coast Guard Navigation Center

Develop products and deliver services that enable a data-driven approach to assessing operational risk in waterways management.



Homeland Security

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United States Coast Guard



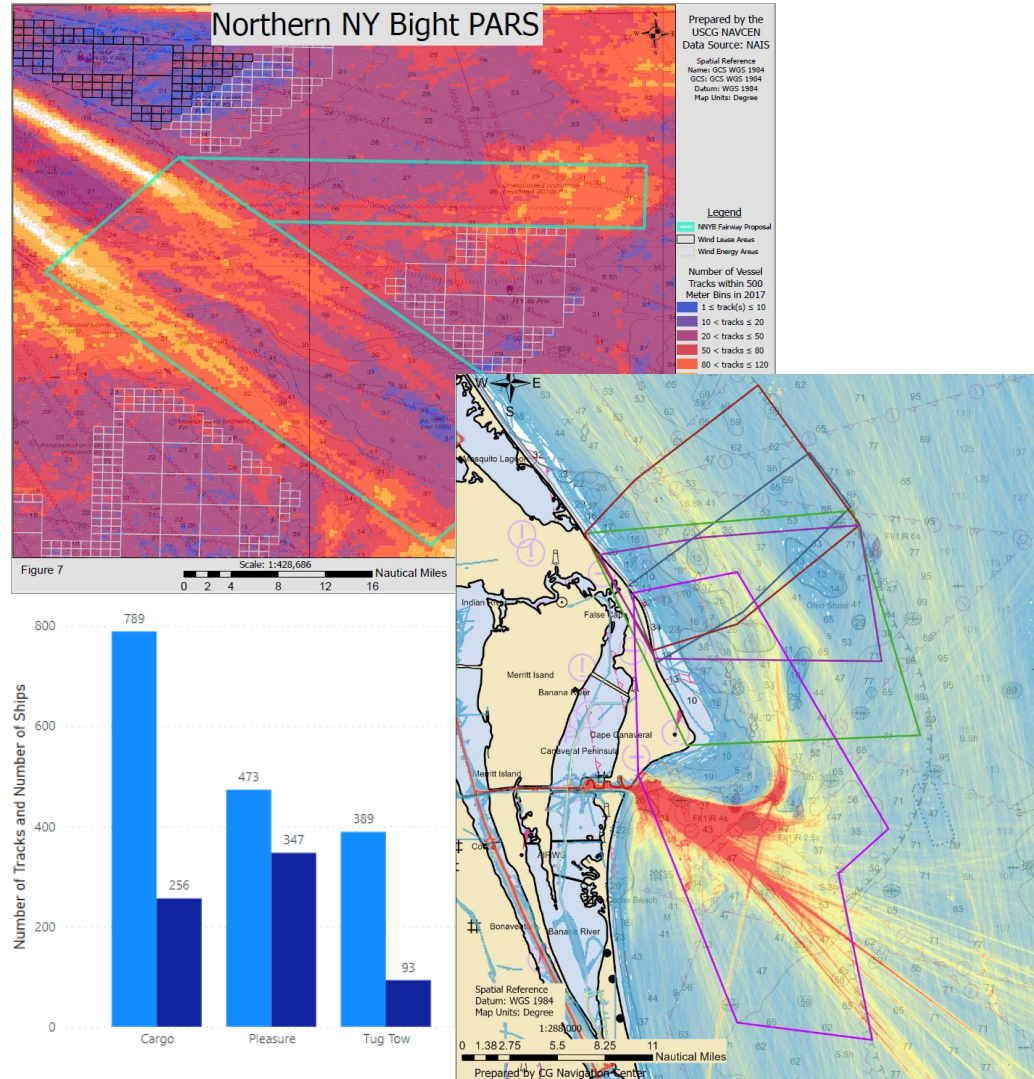






# Data Driven Decisions

- **Waterways Utilization Studies**
  - Port Access Route Study (PARS)
  - Ports and Waterways Safety Assessment (PAWSA)
  - Waterways Analysis Management System (WAMS)
- **Adaptable Waterway Analysis**
  - Commercial Space Operations
  - 5P Brief to White House Clean Energy Advisor
  - Great Lakes Ice Breaking
  - Field support for OGA coordination



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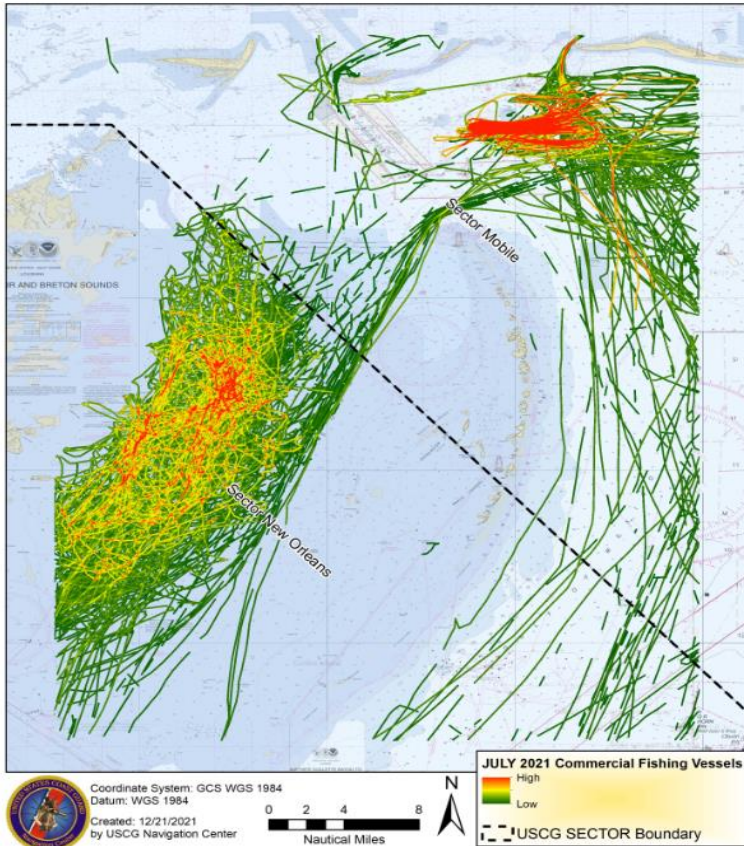




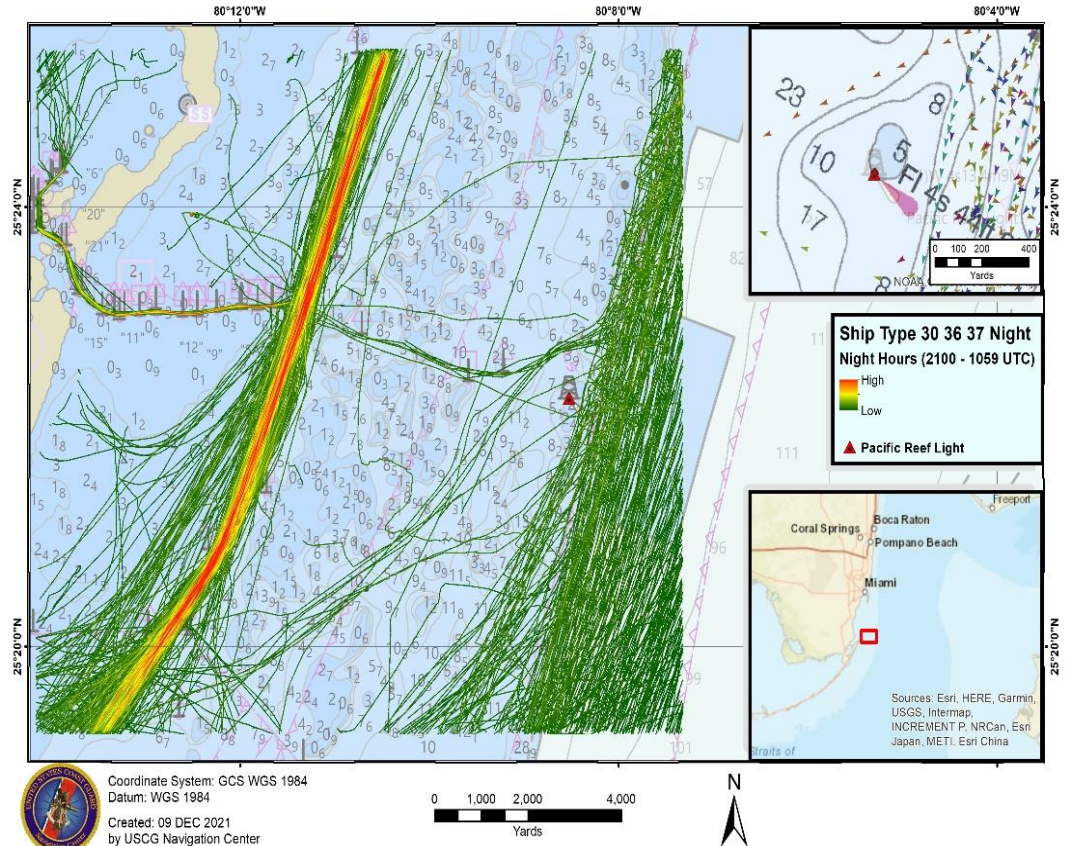


# Supporting USCG Field Operations

### CG Sector New Orleans HIST 2021-365



### CG District 7 DPW HIST 2021-359



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# Marine Environmental Protection & LMR

**MARINE POLLUTION SURVEILLANCE REPORT**

Analysis by: The National Oceanic and Atmospheric Administration, Satellite and Information Service (NOAA NESDIS)

REPORT DATE/TIME: 11/8/2019 1850 (UTC)

DATA SOURCE: SENTINEL1B  
 MODE: Interferometric Wide (IW) VV  
 RESOLUTION: 20 meter  
 IMAGE DATE/TIME: 11/08/2019 1429 (UTC)

**Possible Oil**  
**Possible Thicker Oil**

Suspected Point Source:  
 [48°07'29" N 125°48'19" W]

6.70 km<sup>2</sup> Total Area of Possible Oil

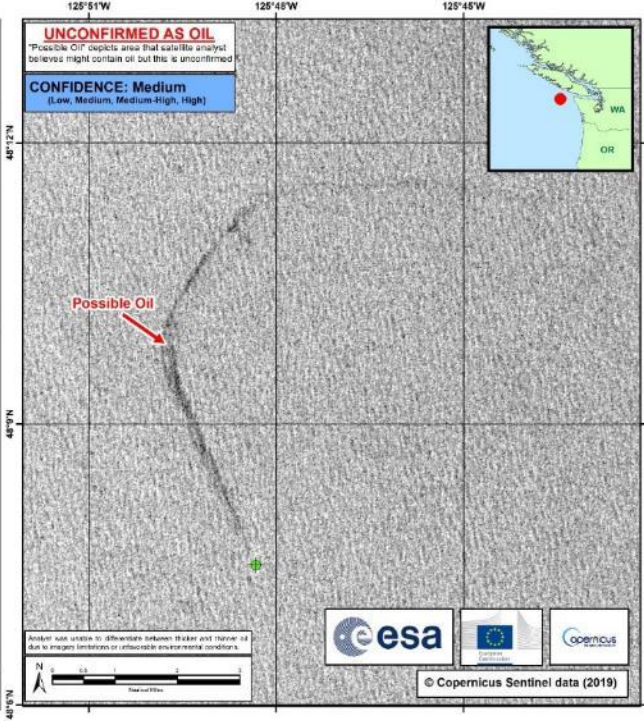
AREA/BLOCK: Washington Oregon 6954

REMARKS: Possible oil was observed in satellite imagery. This anomaly is unconfirmed as oil. The anomaly was located approximately 65 nmi west of the northwestern Washington coast and was approximately 9.9 nmi in length and up to 0.26 nmi in width. It appeared to extend north and eastward from a vessel. The anomaly appeared distinct from its background and widened with distance, and had sharp edges in the portion of the anomaly closest to the vessel. Winds at the time of the image were around 15 kts from the ESE. The anomaly was located just within the US side of the EEZ boundary.

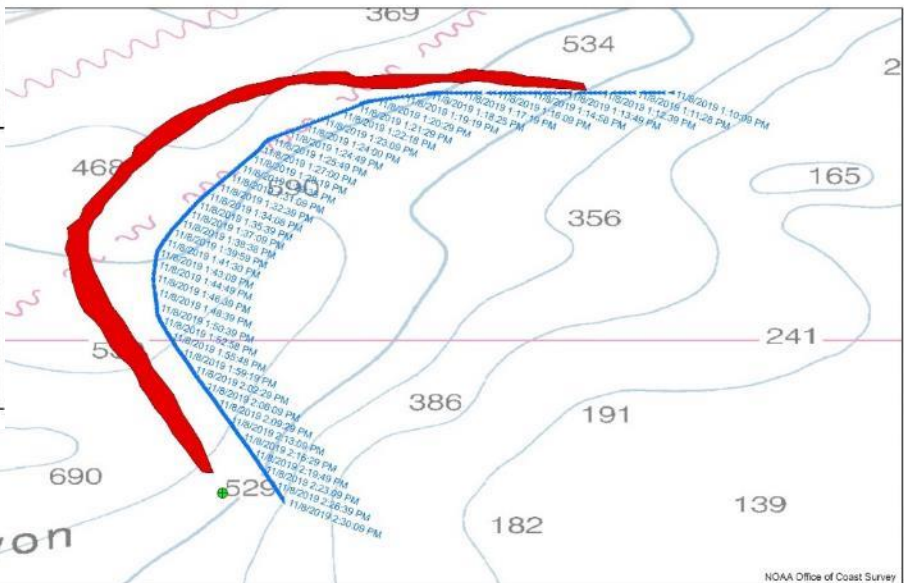
UNCERTAINTIES: The anomaly could have been related to fishing activity.

ANALYST: CLARK/CORTEZ

For further information on oil spill response and assessment go to:  
<https://response.restoration.noaa.gov/oil-and-chemical-accidents/oil-spills/>



## Marine Pollution Surveillance Report (MPSR)



Coordinate System: GCS WGS 1984  
 Datum: WGS 1984  
 Date Created: 13NOV2019

Miles: 0 0.45 0.9 1.8 2.7 3.6

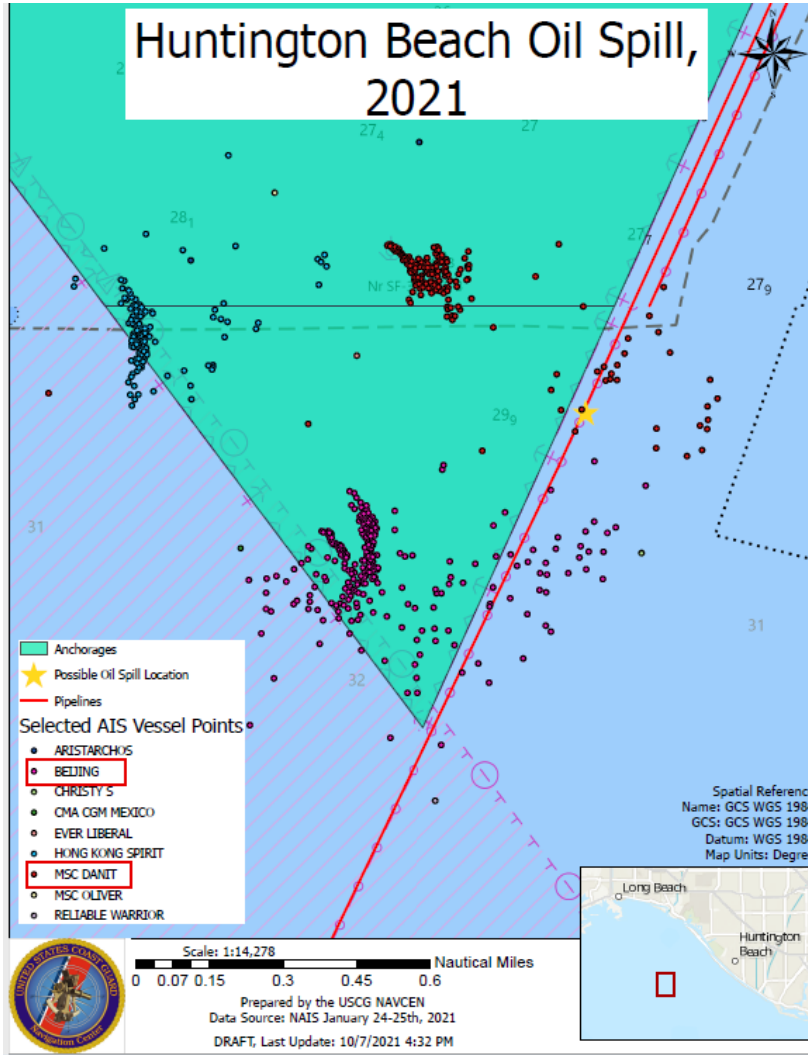
**MPSR 08NOV2019 (1310Z - 1430Z)**

mmsl, name

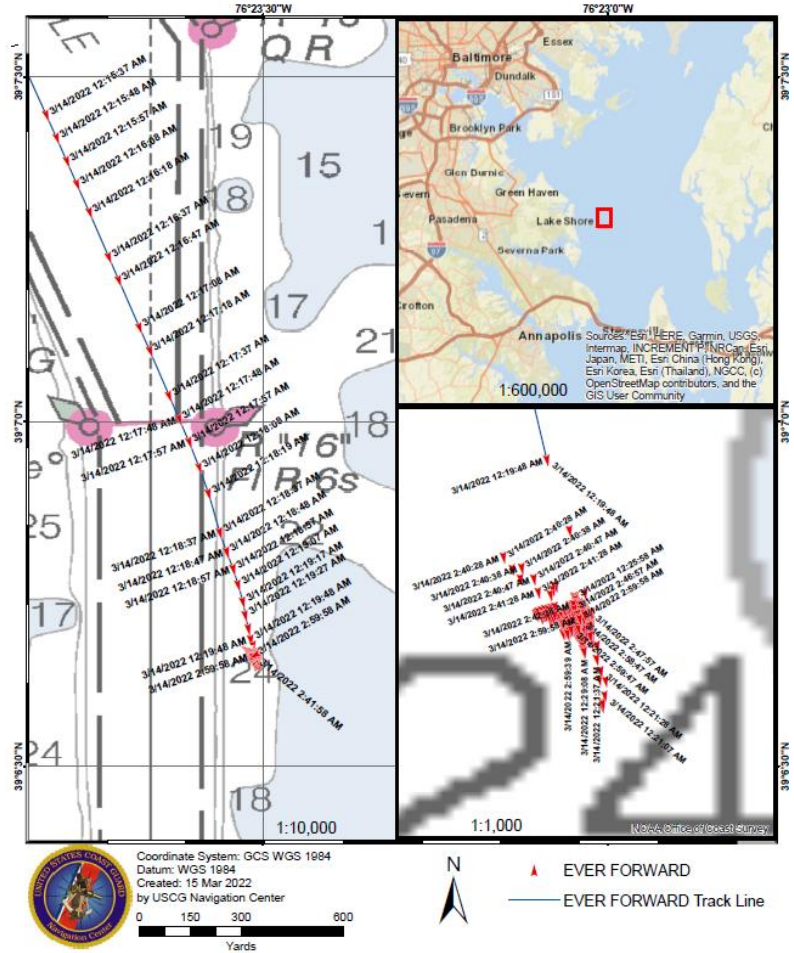
- ▲ 368037000, ISLAND ENTERPRISE
- Point Source
- Possible Oil



# Casualty Investigations



CG Sector Maryland NCR HIST 2022-121



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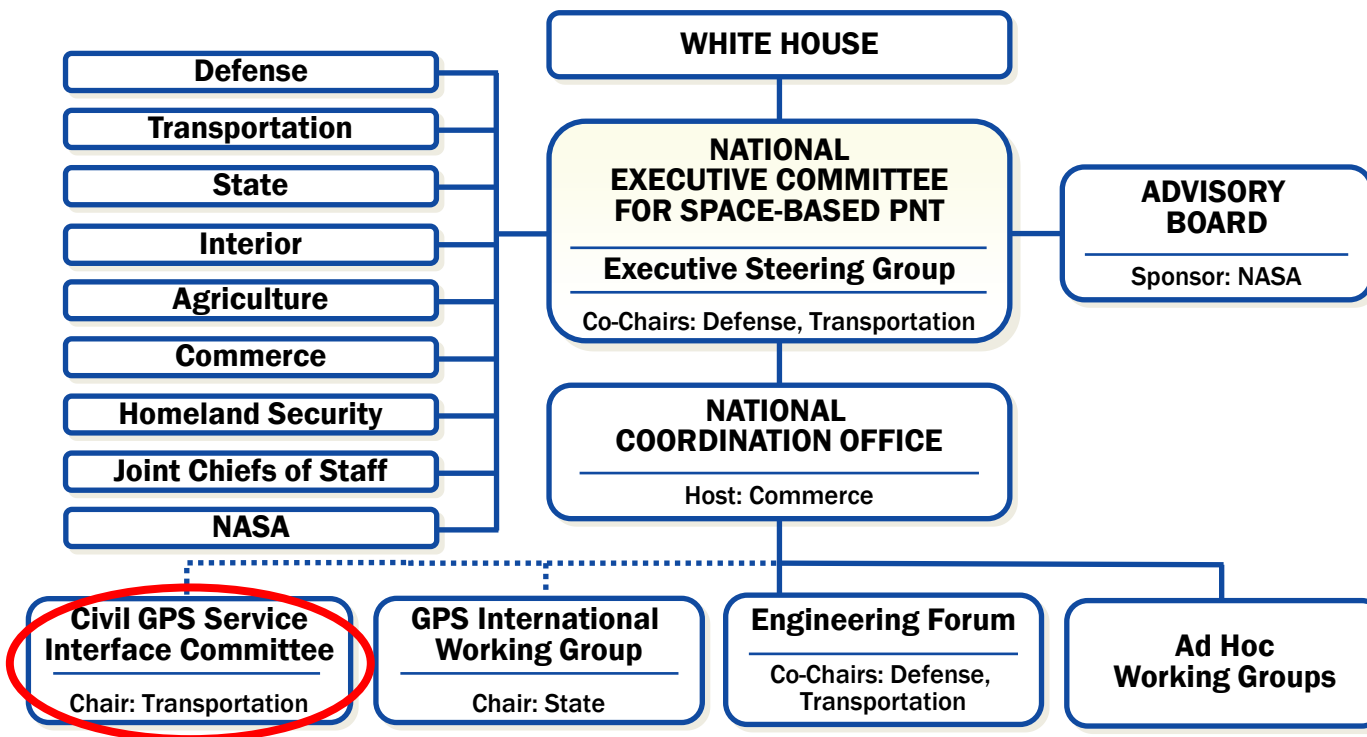
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# U.S. Space-Based PNT Organization Structure

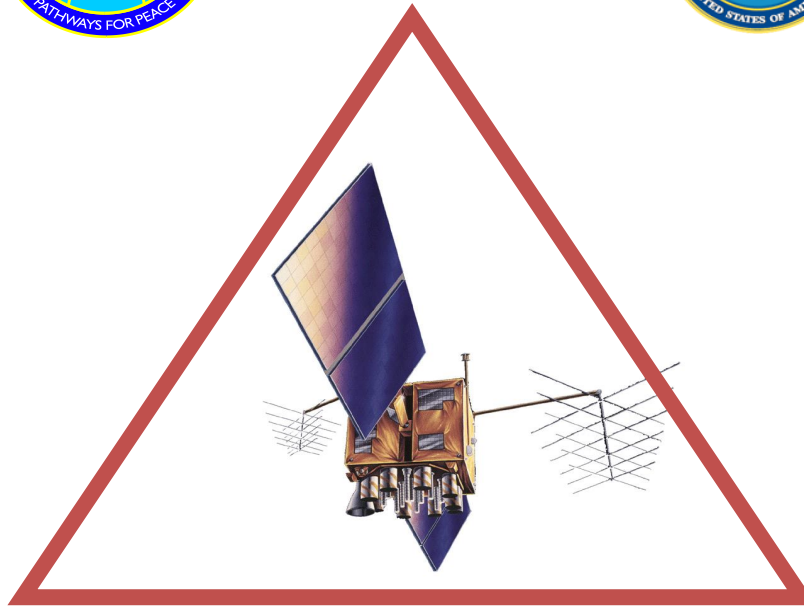


# The GPS Triad

## Joint GPS User Support Service



**USSF GWCC  
(military)**



**USCG NAVCEN  
(surface)**



**FAA NOCC  
(airspace)**







# CRUCIBLE P5 OPCEN Group

**U.S. Strategic Command  
(STRATCOM)**

**Purposeful Interference  
Resolution Team (PIRT)**

**North American Aerospace Defense  
Command (NORAD)**

**Joint Spectrum Center (JSC)**

**U.S. Northern Command  
(NORTHCOM)**

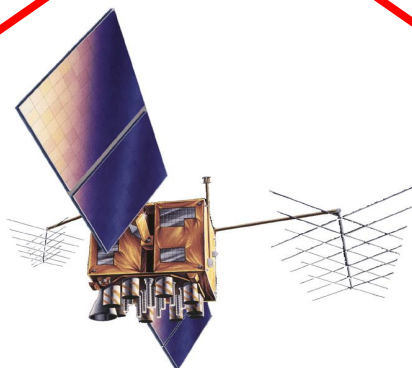
**USAF  
GWCC  
(military)**

**USCG  
NAVCEN  
(surface)**

**DOT  
FAA NASEO  
(airspace)**

**National Telecommunications and  
Information Administration (NTIA)**

**National Coordinating Center  
for Telecommunications (NCC)**



**Federal Communication  
Commission (FCC)**

**Federal Bureau of Investigation  
(FBI)**

**DHS  
CISA  
(critical infrastructure)**

**FCC  
(spectrum)**



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# Questions?



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