

# UAlberta Presentation on Naval Technology

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CANADIAN  
ARMED FORCES



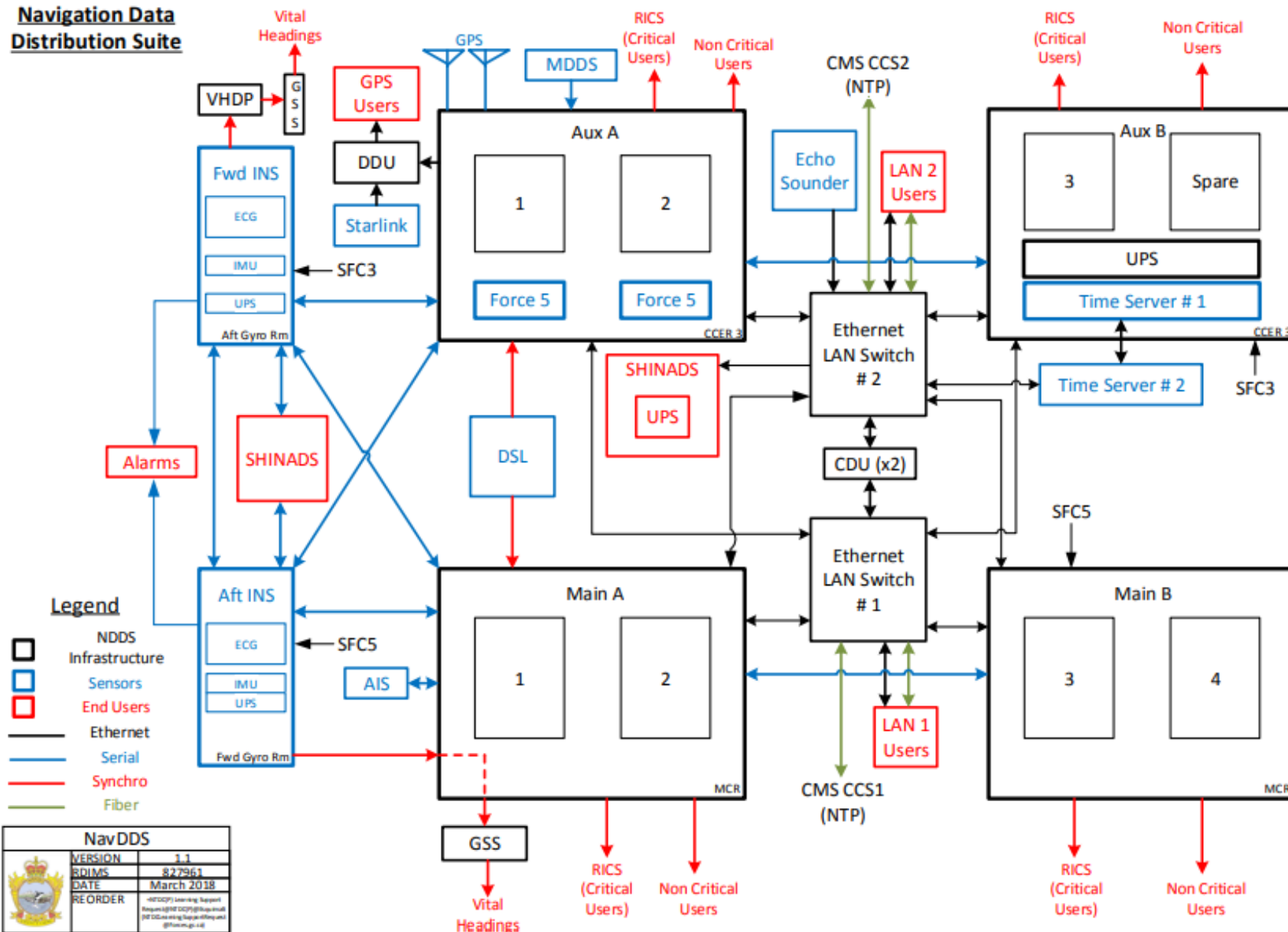
FORCES ARMÉES  
CANADIENNES

This overall classification for this presentation is **UNCLASSIFIED**

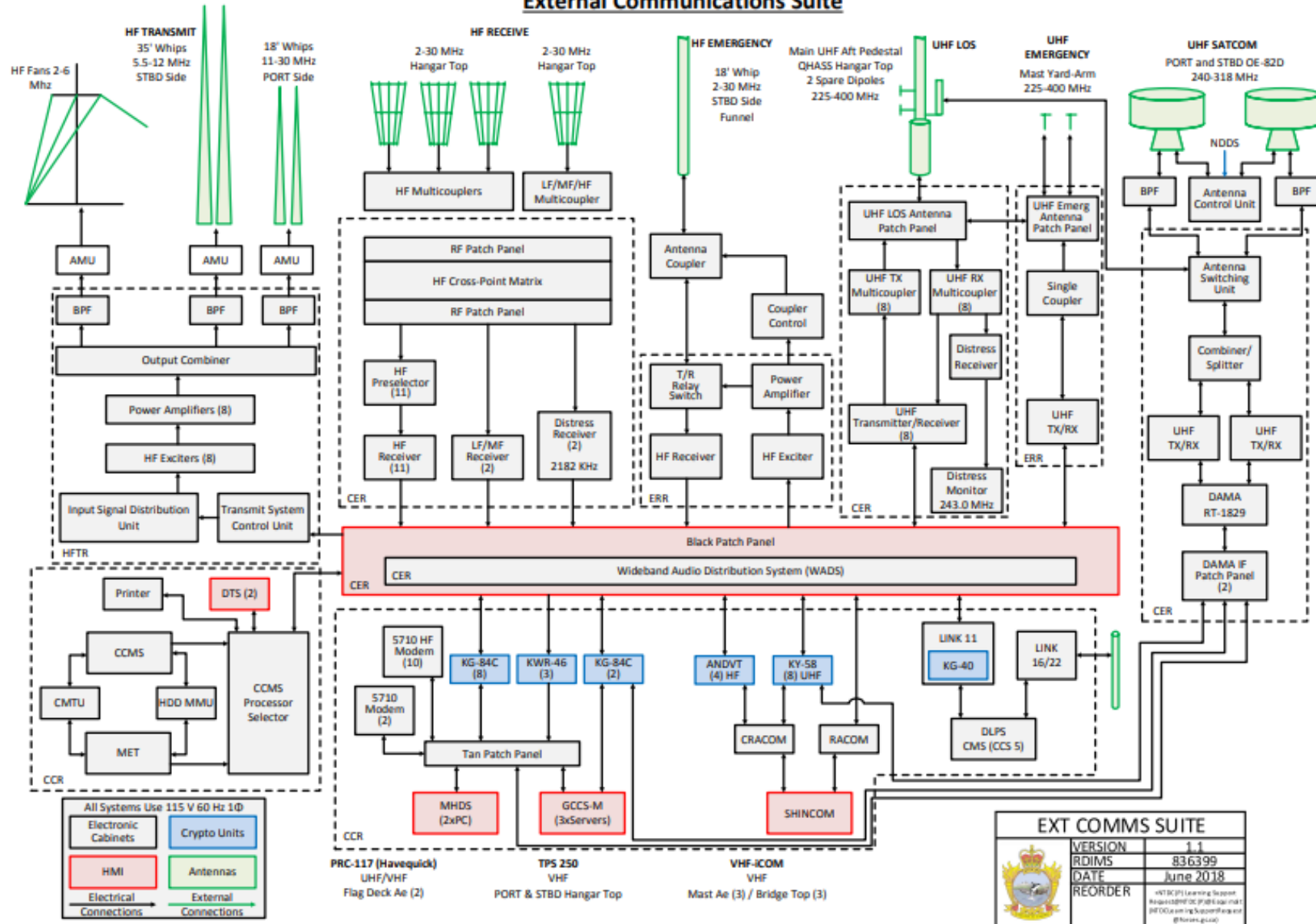
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- What is the CSEO's job?
  - Combat Systems (13)
    - Armament
    - Fire Control
    - Sonar
    - Radar
    - Communications Suite
  - Float/Move/Fight

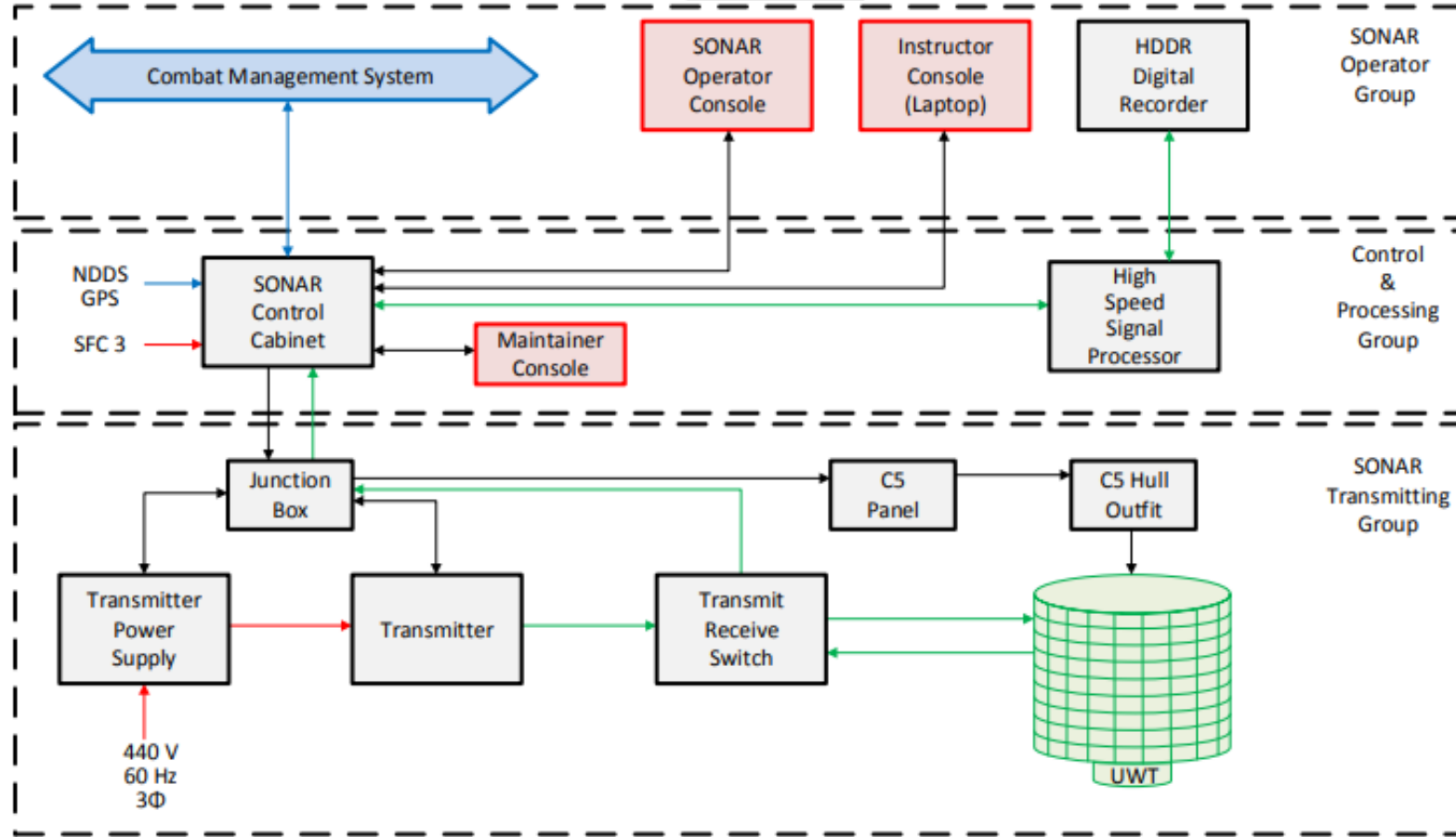
# Navigation Data Distribution System



## External Communications Suite



## HMS 510

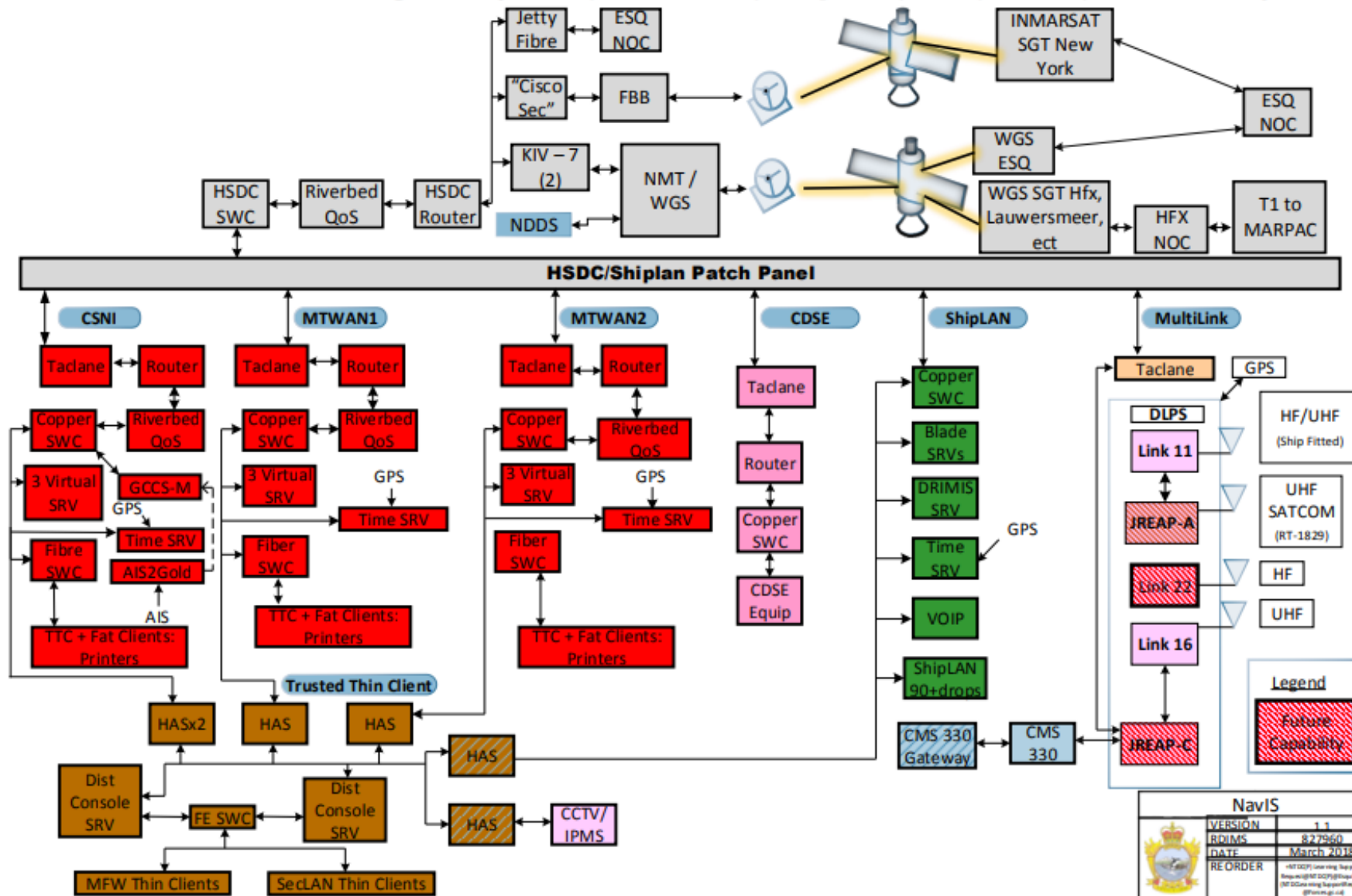


**All Systems Use 115 V 60 Hz**

Electronic	Control / Status / Data
Sensor	Analog & Digitized Acoustic Data
External	External Interface
HMI	Power Connection

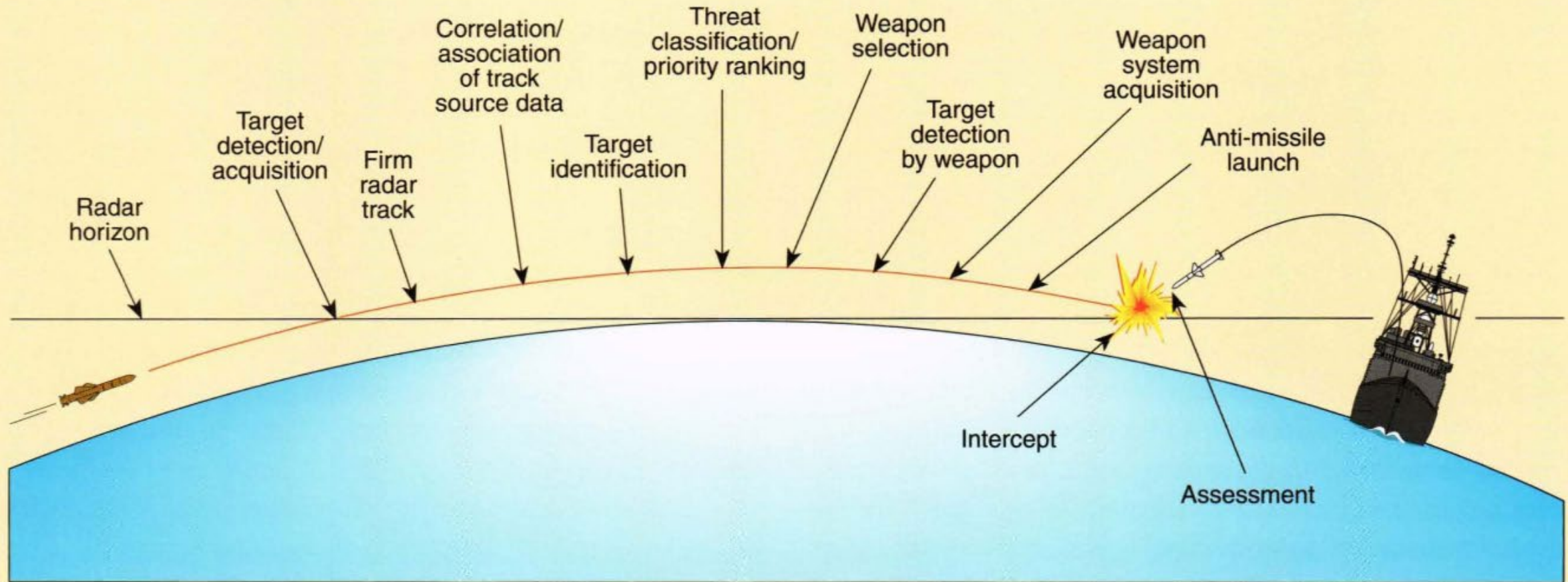
HMS 510	
VERSION	1.1
RDIMS	827955
DATE	March 2018
REORDER	447321/115v 60hz Support Request@RDC21@navy.mil 447321/115v 60hz Support (@fmrhc.gc.ca)

## Naval Information System (HSDC, Multi-Link, ShipLAN, FBB, PMSC, Thin Client)



NavIS	
VERSION	1.1
RDIMS	827960
DATE	March 2018
REORDER	NAV 2021 User Req. Support Request@NAV2021@navy.mil NAV 2021 User Req. Support@navy.gc.ca

# Detect to Engage Sequence



**Figure 4.** The detect-to-engage sequence may begin with long-range detection of threats where long-range sensors or battle group assets are employed to detect high-flying threats. Alternatively, for low-flying anti-ship cruise missiles, horizon limitations may impose a very short time line on defensive systems.



- Watch Schedule
- Morning Sync
- Flex
- Food
- Work

- Immediate Troubleshooting
- Forecasting
- Communications

**Questions?**