



FFG(X) Update National Symposium – Surface Navy Association

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FFG(X) System Description

Mission:

Anti-Submarine Warfare, Surface Warfare, Electromagnetic Maneuver Warfare, and Air Warfare

Description:

FFG(X) is an agile, multi-mission platform designed for operation in blue water and littoral environments.

Employment:

Operate independently or integrated with a Strike/Task Group to conduct offensive and defensive Surface, Anti-Submarine, and Air Warfare



FFG(X) supports the *Navy the Nation Needs* and the validated requirement for 355 Battle Force ships in line with the 2018 National Defense Authorization Act (NDAA).



Guided Missile Frigate (FFG(X)) Capabilities



AW

- 3x3x3 fixed-face EASR
- Mk41 VLS (32 cell)
- SM-2 Blk III C
- ESSM Blk 2
- 21 cell RAM launcher
- UPX-29 IFF
- CEC

EW / IO

- SLQ-32(V)6 (SEWIP Blk II) w/ HGHS and Specific Emitter Identification (SEI)
- Spectral (Follow on to SSEE Inc F)
- AOEW (on airborne asset)
- SWAP-C reservation for SLQ-32C(V)7 (SEWIP Blk III Lite)
- SWAP-C reservation for 150kw laser

WATERCRAFT

- 7m RHIB (x2)

SUW

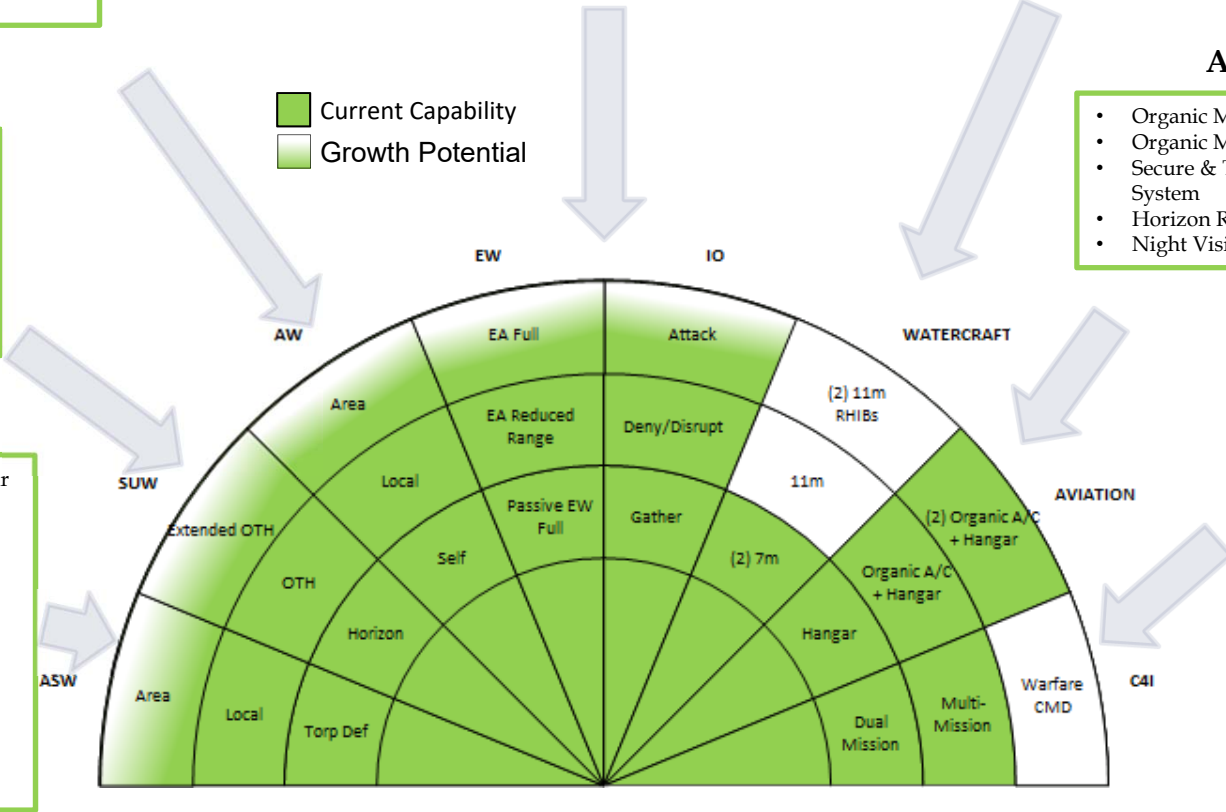
- 57mm gun (with ALaMO)
- Mk160 GFCS
- Mk20 Mod 1EOSS
- OTH fire control system
- OTH 2x4 (T)/ 2x8 (Obj)
- 50 caliber machine guns
- iStalker w/360° coverage
- NGSSR

AVIATION

- Organic MH-60R (x1)
- Organic MQ-8C (x1)
- Secure & Traverse Aircraft Handling System
- Horizon Reference System
- Night Vision Device Compatibility

ASW

- AN/SQS-62 Variable Depth Sonar or Low Band Hull Array
- TB-37 MFTA w/ TACI
- AN/SQQ-89(V)15
- USW-DSS
- AN/SLQ-61 Lightweight Tow or SLQ-25 NIXIE
- ADC (Torp CM)
- Mk41 VLS supports VLA for all-wx stand-off ASW weapon (future)
- SVTT - Shipboard Torpedo Launch (Obj)



C4I/ CMS

- CANES
- ICOP
- Link-11/22
- Link-16
- LOS/STJ/JRE
- HF/VHF/UHF LOS
- UHF/SHF/EHF SATCOM
- NTCDL
- Frigate Weapon System (FWS)
- Advanced Cyber Design
- GPNTS & ECDIS



FFG(X) Requirements Development Process



Conceptual Design Phase

1. Draft CDD

- Informed by FF CDD, DDG CDD, FFG RET, RFI, process, analysis, staffing process

1

FFG(X) Draft
CCD

4. Cost /Capability Trades

- Frigate Affordability Board
- Technical and Leadership adjudication
- Informed Cost / Capability decisions

4

Cost/Capability
Trades

2. Draft System Specifications

- Basis for industry efforts
- “Derived” requirements based on CDD
- Updated based on Cost Reduction Initiatives

2

Draft Spec

3

Industry
Feedback

3. Industry Feedback

- Cost Reduction Initiatives
- Monthly Technical Exchange Meetings
- Design Reviews

Supported Industry-informed cost-capability trades



Guided Missile Frigate (FFG(X)) Acquisition Strategy/Profile



- **Full and Open Competition**
- **Conceptual Design Contracts awarded in FY18 - Mature Designs, Reduce Technical Risk, Identify Cost Reduction Opportunities**
 - Awarded to five vendors
 - 16 month period of performance
 - Initial Conceptual Design Review with Industry: Q1FY19
 - Final Conceptual Design Review with Industry: Q3FY19
- **Detail Design and Construction (DD&C) Contract award to a single vendor in FY20**
 - Request for Proposals in 4QFY19
 - Contract award in 4QFY20

FY	20	21	22	23	24	25	26	27	28	29	30
QTY	1	1	2	2	2	2	2	2	2	2	2
Hull Number	1	2	3	5	7	9	11	13	15	17	19
			4	6	8	10	12	14	16	18	20



FFG(X) Conceptual Design Contracts



**Ingalls
Shipbuilding**





FFG(X) Program Status



- **FFG(X) Requirements are mature – informed by detailed analysis, early engagement with industry, and a collaborative Conceptual Design phase**
- **Ongoing Conceptual Design phase ends in June 2019**
 - Matures Designs via Navy-Industry engagements and CDRL comments
 - Reduces Technical Risk
 - Identifies Cost Reduction Opportunities
- **FFG(X) Program is on track for a Detail Design & Construction Award to a single vendor**
 - Request for Proposals – Q4FY19
 - DD&C Award – Q4FY20



Questions?