Mission Adaptive Rotor Industry Day

CAPT Fred Flight
COMNAVAIRFOR
Helicopter and CNATRA Requirements (N804)
(757) 444-6658 DSN 564 // fred.flight@navy.mil

USN Helicopter Master Plan

Acquisition Strategy -- Reduces Type/Model/Series from 6 to 2

HSL - ASW/SUW
(DD, DDG, CG, FFG)

SH-60B (FY16)

HS - ASW/SAR
(CV(N))

SH-60F (FY14)

MH-60R

HC/VC - VIP/VOD/SAR
(Station Support)

UH-3H
(FY09)

HC – VERTREP/SAR
(CLF, LHD/A)

CH-46D (Complete)

HS – CSAR/SPECWAR
(CV(N))

HH-60H

(FY14)

SAR
(Station Support)

HH-1N – (FY09)

MH-60S

* H-53 Decision Pending OPNAV Study

USN Helicopter Missions

- ASW
- SUW
- C2
- OTH-T
- ESM
- MIW (Dedicated and Organic)
- NSW
- CSAR
- VERTREP
- LOGISTICS/PAX/SAR
- HEAVY LIFT

Future Challenges

- Force Protection
  - Survivability improvements
  - Commonality to all RW Platforms
    - Overland
    - Overwater
- Improved Aircraft Performance
  - Mission Adaptive Rotor Technology
  - V-22 platforms
  - Beyond V-22 platforms
- Improved Weapons and Sensors
- Unmanned Systems Growth

Future Challenges

- Force Structure Numbers
  - Optimal number of MH-60R/S aircraft
  - Appropriate flavor and number of Spiral Upgrades
  - Follow-on Platform to the MH-60R/S
  - Future of MH-53E and Dedicated AMCM/Navy Heavy Lift
- Additional Mission Growth
  - Dedicated NECC and NSW/SOF support?
  - Humanitarian Assistance/Disaster Relief
- Unmanned RW Systems
  - Beyond Firescout
  - Beyond Scan Eagle

Backups

Helo CONOPS Transition

HSL

2 Wings
- 2 FRS
  - 4 Mayport
  - 4 San Diego
  - 1 Japan
  - 1 Hawaii

HS

2 Wings
- 1 FRS
  - 5 East
  - 4 West
  - 1 Japan

HC

2 Wings
- 2 FRS
  - 3 East
  - 1 West
  - 1 Guam

Reserve

1 Wing
- 3 East
- 2 West

LEGACY:

7 Wings/5 FRS/29 Fleet Squadrons

CONOPS

NEW:
4 Wings/4 FRS/37 Fleet Squadrons

HSM

2 Wings **San Diego/Mayport**
- 2 FRS
  - 4 CVW Jax + 1 EXP
  - 5 CVW San Diego
  - 1 CVW Japan
  - 3 EXP Mayport
  - 1 EXP San Diego + 1 EXP
  - 1 EXP Japan
  - 1 EXP Hawaii

HSC

2 Wings **San Diego/Norfolk**
- 2 FRS
  - 4 CVW Norfolk
  - 5 CVW San Diego
  - 1 CVW Japan
  - 4 Exp Norfolk
  - 3 Exp San Diego
  - 1 Exp Guam
  - 1 Exp Japan

Romeo CVW, Sierra CVW, Romeo Exp., Sierra Exp and SAR stations

Baseline MH-60R Capabilities

Common Digital Cockpit

- Full Tactical/Mission Capability
  - Data Handling/Display/Fusion
- NVG Compatible
- HOL Operating Software
- ARC-210 Radios (Voice UHF/VHF/SATCOM)
- Digital ICS
- Navigation Systems

Hellfire Missiles & Machine gun

MK-46/50/54 Torpedoes

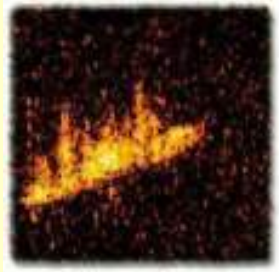
Integrated Self Defense

ALQ-210 ESM

AQS-22 ALFS DIPPING SONAR

Sonobuoys

COTS Acoustic Processor



APS-147 Multi-Mode Radar

Hawklink
C Band Sensor Data Link

AAS-44C FLIR

MH-60S Seahawk

(Capabilities are Block Dependent)

Characteristics

- Mission gross weight 22,500
- Mission endurance: 2, 3+15, 4+30 Hours
  - (0, 1, 2 extra internal tanks)
- Dash speed: 154 kts
- Crew of 4/5
- Up to 12 Passengers

Navigation Systems

- VOR/ILS
- GPS/INS
- TACAN
- Radar Altimeter
- ADF
- VHF/UHF DF

Missions

- CSAR
- OAMCM
- NSW
- SUW
- Carrier Plane Guard/SAR
- Force Protection (FP)
- MIO
- VERTREP

New Development

- OAMCM (HSC EXP)
- Armed Helo (Link-16)

Stores/Weapons and Self Defense

- FLIR/Hellfire
- Side Suppression Weapon
  - GAU-21 (0.50 Ca.), M240 (7.62) Machine Gun
- Integrated Self Defense (ISD): AAR-47(V)2, ALE-47, ALQ-144A (V)6,APR-39B (V)2

Comm Systems & Links

- Dual UHF/VHF/SATCOM Radios (ARC-210)
- IFF
- Link-16

MH-53E Heavy Lift

- GPS Equipped / all weather aircraft
- Crew: 2 pilots / 2-9 aircrewmen per mission
- 21K pounds fuel
- 55 PAX carrying capacity
- 20K internal / 25K external payload
- 400 NM Range