The Current Fleet Of DoD Rotorcraft Cannot Continue To Be Incrementally Improved To Meet Future Operational Requirements. Significant Increases In Range, Speed, Payload, Survivability, Reliability, And Reduced Logistical Footprint Are All Required And Can Only Be Met Through The Application Of New Technologies, Which Are Best Developed Through A Joint Multi-role/Commonality Approach.
Agenda

- FVL Development Timeline
- SOF FVL Transformation
- SOF FVL Mission Package
- Way Ahead
**FVL Technology Demonstration Program**

- **Science & Technology**
  - **Phase 1 – Air Vehicle Dev**
    - PSR
    - CSR
    - 1st flight
  - **Phase 2 – Mission Systems Dev**
    - Phase 2 Spec
    - 1st flight

**Notional FVL-Medium Acquisition Program**

**FVL Development**

- FVL ICD approved by JROC May 13
- FVL Medium Class will “Lead the Fleet”
- FVL Technology Development FY 13-18
- Prototype Development FY 19-26
- FVL Medium Capabilities Development Document FY22
- Low rate initial production FY 27
- FVL Medium IOC FY 30
SOF FVL Transformation

SOF FVL Intent: To assist the Services and DoD in the development, production, and fielding of the most capable Service common vertical lift platform

Key developmental requirements:
- Lighter & Faster
- Increase Payloads
- Increase Lethality
- Increase Survivability
- Increase Situational Awareness
- Reduce Crewmember Workload
- Seamless & Quick Aircraft Integration
SOF FVL Transformation

FVL Light
- 200+ knots in mission configuration
- 6k/95 – high hot capability
- Internal load 4-6 passengers/2-4.5k pounds
- SOF mission package

FVL Medium
- 200+ knots in mission configuration
- 6k/95 – high hot capability
- Internal load 11-24 passengers/6-20k pounds
- SOF mission package

FVL Heavy
- 200+ knots in mission configuration
- 6k/95 – high hot capability
- Internal load 33-44 passengers/33-44k pounds
- SOF mission package

A/MH-6M (51)
MH-60M (72)
MH-47G (69)
SOF Mission Package

- Aerial Refuel
- Shipboard Compatible
- Integrated Weapons Systems
- Optionally Manned/Unmanned Teaming LOI 4
- Enhanced Voice and Data Communications
- Collaborative Mission Planning and Execution
- Increased Power Capability
- Integrated 360 degree Multi-spectrum Sensor Capabilities
- Active/Passive Integrated Survivability System
- Active/Passive Signature Reduction
FVL/RW SOF Peculiar (SO-p) Integration

- **Range/Speed**
  - Compound Helicopters
  - Composite Structures
  - Dynamically Shapeable Rotor Blades

- **Survivability**
  - Small Arms/RPG Shields
  - Transparent Armor

- **Signature Management**
  - Low Observable
  - Color Changing Paint
  - Low Acoustic Signature
  - Active Acoustic Suppression

- **Penetration**
  - Penetration into hostile/non-permissive environments

- **Weapons**
  - Point Target
  - Area Effect

- **Mission Equipment**
  - OPV – Optional Piloted Vehicles with BLOS data links
  - Manned/Unmanned Teaming: Control UAV Helos From Manned Helo Teammate
  - ADAS
Questions ?