

# Special Operations Forces

## Industry Conference



### SOF Future Vertical Lift

A composite image featuring a military helicopter in the center. Two soldiers in full combat gear are running towards the right, carrying rifles. The background is a stylized globe with a grid overlay, suggesting global operations. The overall color palette is muted, with greys, browns, and yellows.

**ROTARY WING**

# Bottom Line Up Front

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.



## ROTARY WING





# Agenda

- **FVL Development Timeline**
- **SOF FVL Transformation**
- **SOF FVL Mission Package**
- **Way Ahead**



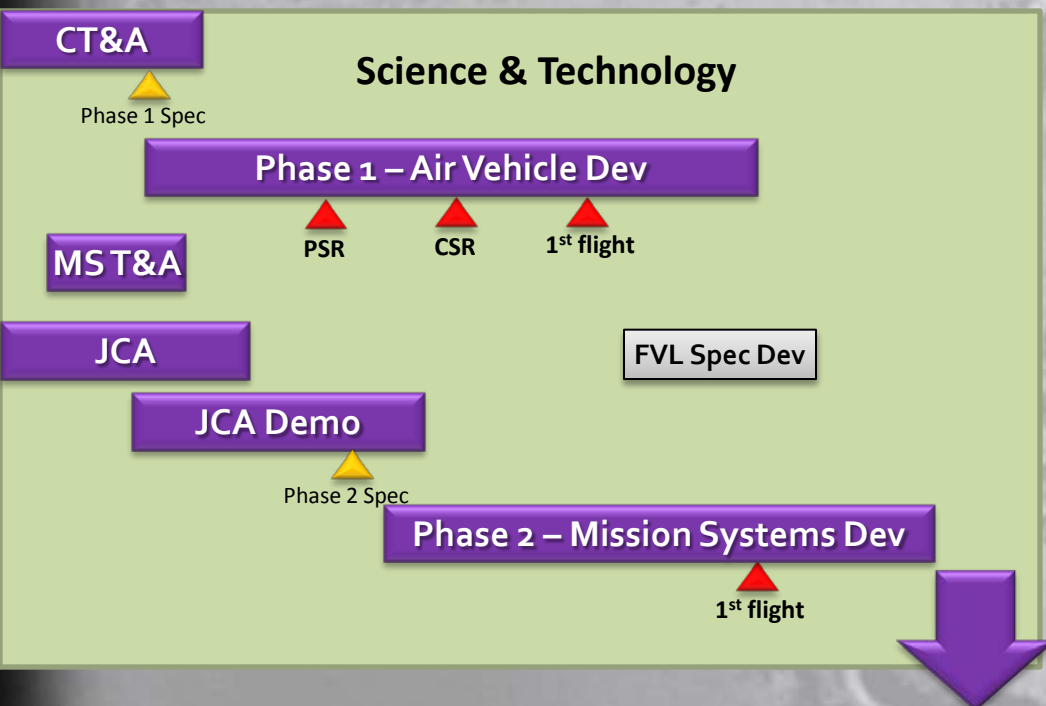
## ROTARY WING



# FVL Timeline

FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
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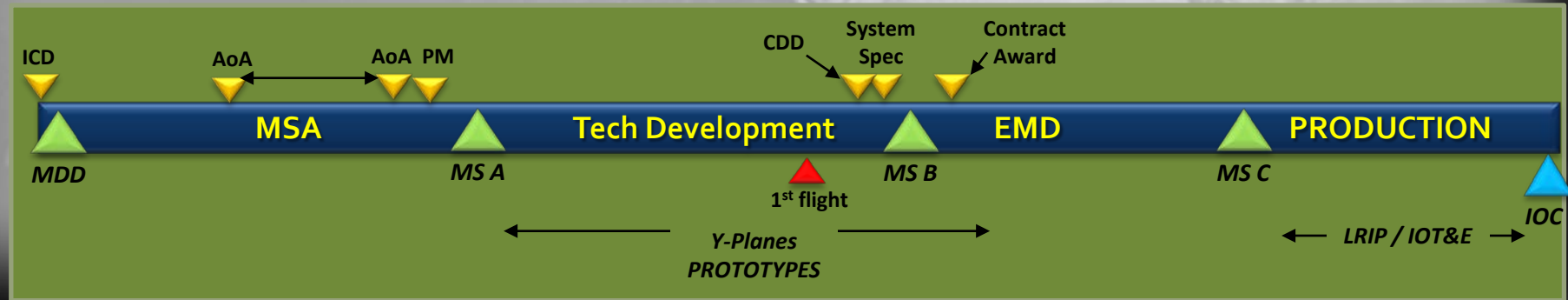
## FVL Technology Demonstrator Program



## 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

## Notional FVL-Medium Acquisition Program



# 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**



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# SOF FVL Transformation



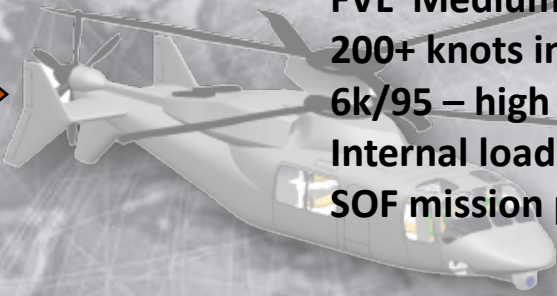
A/MH-6M (51)



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



MH-60M (72)



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



MH-47G (69)



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



## ROTARY WING



# 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**



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# 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



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# Questions ?



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