

US Special Operations Command



USSOCOM Required Vertical Lift Capabilities (U)

Briefer: Mr. Jim Elder

SORR J8-R

Date: 20 Feb 09

The overall classification of this briefing is:

UNCLASSIFIED



SOF

Mission Requirements

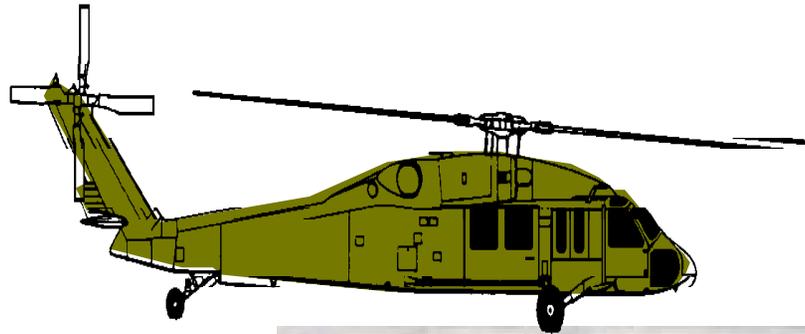
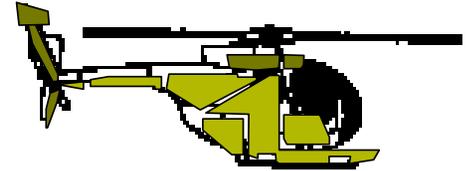
- **Primary mission:** infiltration, exfiltration, or resupply of SOF in adverse weather during one period of darkness
 - Support full range of Special Operations Core Activities
 - Operate in all-terrain, day / night, all weather
 - Capabilities that facilitate maneuver from strategic and operational distances
 - Sufficient Range
 - Sufficient Speed
 - Low Observable capabilities
 - Survivability in all potential threat environments including anti-access
 - Operate in and from austere environments, including seabase
 - Precision effects



SOF Vertical Lift Platforms

➤ Current:

- A/MH-6M “Little Bird” - 51
- MH-60K - 72
- MH-47G – 61
- CV-22 - 50





SOF Insights

- **Higher Elevation Vertical Insertion Capability:**
 - Insert Sufficient Combat Power at Higher Elevations
- **Medium Lift Capability Required For Specific Target Sets**
 - Mountainous, Urban & Maritime Operational Constraints
 - Mitigate Risk Associated with Employment of Heavy Lift VTOL
- **Rapid Operational Reach:**
 - High Value Targets Present Fleeting Exposure Requiring Rapid Response
 - Actionable Intelligence Windows Necessitate Speed, Range and Altitude
 - Distance to Objective Areas Will Expand with Reduction in Forward Presence
- **Reduced Support Foot Print:**
 - SOF Base of Operations Will Require Greater Standoff/Seabase



The SOF VTOL Need

- **Current and Future Requirements Exceed Existing Helicopter Speed, Range and Lift Capacities**
- **USSOCOM is dependant upon Services for acquisition of its basic air platforms**
 - **Current FW/RW fleet is being recapitalized across the board**
 - **CV-22s are beginning to come on line**
- **Future**
 - **Heavy Lift VTOL/Strike – Replace current A/MC-130 platforms**
 - JFTL
 - **Medium Lift/Attack – Replace current MH-60M/MH-47G**
 - JMR
 - **Light Attack/Reconnaissance – Replace current A/MH-6**
 - ?

SOF requires TRANSFORMATIONAL capabilities



SOF Future Heavy Lift VTOL Replacement Platform (Notional)

SOF requires TRANSFORMATIONAL capabilities



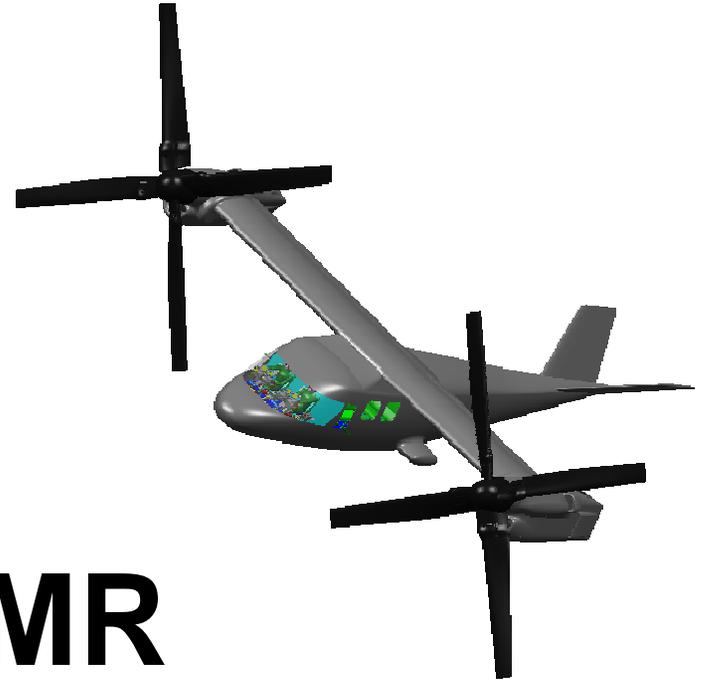
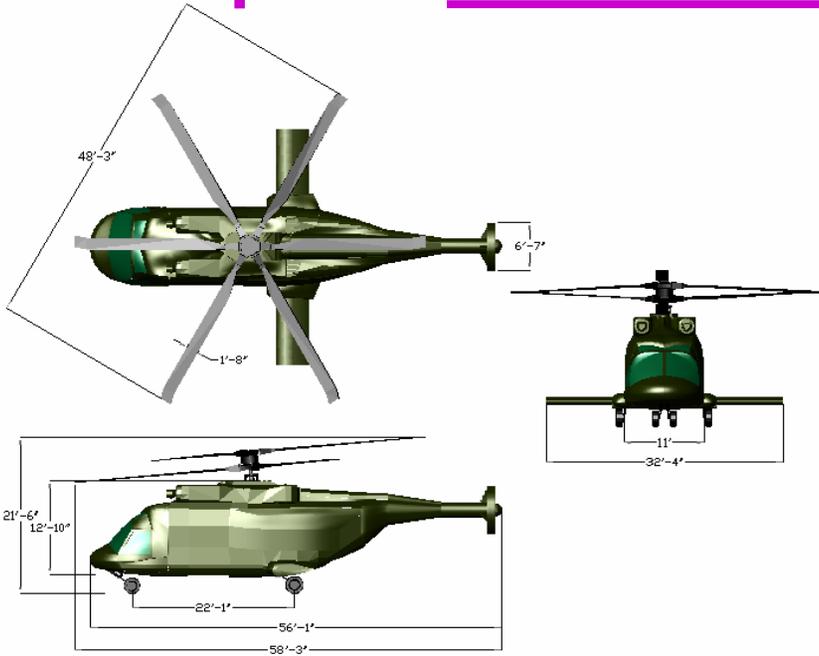
JFTL





SOF Future Medium Lift VTOL Replacement Platform (Notional)

SOF requires TRANSFORMATIONAL capabilities



JMR





SOF Future Light Attack/Reconnaissance VTOL Replacement Platform (Notional)

SOF requires TRANSFORMATIONAL capabilities





Rotary/Tilt Rotor Technology

- **DARPA Program Connections:**
 - Improved Performance
 - Low Observable capabilities
 - Survivability in all potential threat environments including anti-access

- **HOW?**
 - Advanced Rotor Technology
 - Mission Adaptive Rotor
 - Signature Reduction and Survivability through advanced rotor designs
 - IR
 - RF
 - Acoustic “quieting”
 - Optical
 - Increased agility, speed, range, high altitude performance
 - Advanced Integrated Sensor suites