CH-47
Cargo Helicopters

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CH-47F

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Product Manager
CH-47 Modernization

Luther G. Jones Army Aviation Sustainment Summit
October 5, 2017
America’s Force of Decisive Action

H-47 Configuration Roadmap

<table>
<thead>
<tr>
<th>MISSION</th>
<th>(FY17-19) (Near Term)</th>
<th>(FY20-24) The POM Years</th>
<th>(FY25-FY43) The Out Years</th>
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<tbody>
<tr>
<td>Cargo</td>
<td>H-47 D/F/G</td>
<td>H-47 D/F/G &amp; Block II</td>
<td>H-47 Block II/III Until FVL Heavy</td>
</tr>
</tbody>
</table>

2004 MH-47G

2006 CH-47F BLOCK I

Current Planned

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Planned</th>
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<tr>
<td>CH-47D</td>
<td>47</td>
<td>0</td>
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<tr>
<td>CH-47F</td>
<td>408</td>
<td>473</td>
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<tr>
<td>MH-47G</td>
<td>69</td>
<td>69</td>
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As of 14 Sep 2017

Chinook Block II and Block III maintain the Army's only heavy lift capability until Future Vertical Lift Capability Set 5 Decision

Major Changes

Rotor and drive train

ACRB

Fuel System

Number of Aircraft: 473

Number of Aircraft: 69

FVL Cap Set 5 Decision – Outside SPAR 19

Block III Decision Point

Engine Upgrade

FY 19 Blk II Tests Begin

FY 21 Milestone C

Time Now

Production Ends FY20
Chinook Fielding Plan

<table>
<thead>
<tr>
<th>UNIT</th>
<th>Aircraft Quantity</th>
<th>Start Date</th>
<th>Complete Date</th>
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</thead>
<tbody>
<tr>
<td>H/1-214th Avn Regt</td>
<td>9</td>
<td>2QFY15</td>
<td>3QFY15</td>
</tr>
<tr>
<td>FORSCOM (1AD CAB)</td>
<td>12</td>
<td>3QFY15</td>
<td>1QFY16</td>
</tr>
<tr>
<td>FORSCOM (3ID CAB)</td>
<td>12</td>
<td>2QFY16</td>
<td>3QFY16</td>
</tr>
<tr>
<td>FORSCOM (82 CAB)</td>
<td>12</td>
<td>3QFY16</td>
<td>4QFY16</td>
</tr>
<tr>
<td>FORSCOM (10 MD CAB)</td>
<td>12</td>
<td>4QFY16</td>
<td>1QFY17</td>
</tr>
<tr>
<td>FORSCOM (101 CAB)</td>
<td>12</td>
<td>1QFY17</td>
<td>3QFY17</td>
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<tr>
<td>FORSCOM (1CAV CAB)</td>
<td>12</td>
<td>3QFY17</td>
<td>4QFY17</td>
</tr>
<tr>
<td>FORSCOM (4ID CAB)</td>
<td>12</td>
<td>4QFY17</td>
<td>1QFY18</td>
</tr>
<tr>
<td>FORSCOM (1ID CAB)</td>
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<td>1QFY18</td>
<td>2QFY18</td>
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<td>PACOM (16 CAB)</td>
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<td>2QFY19</td>
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<td>3QFY19</td>
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<tr>
<td>USARSO (1-228th DET)</td>
<td>5</td>
<td>3QFY19</td>
<td>2QFY20</td>
</tr>
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</table>

- All COMPO 1 units receive MYII aircraft (per DA directive)
- Ft. Rucker will train the CH-47F Initial Qualification Course
- PM will continue to train units receiving MYII aircraft & SW upgrades
## Cargo Ongoing Developmental Efforts

### Advanced Chinook Rotor Blade (ACRB)
- Redesign blade to provide ~1,500 lbs payload increase
- Form, fit, function replacement for legacy blade
- Flight demo completed
- Production with Block II

### Cargo Platform Health Environment (CPHE)
- Integrated HUMS solution leverages aircraft data architecture
- Replaces AVA – automatic data capture for T&B
- Limited additional hardware – near zero weight increase
- MYII baseline production configuration fielding

### Digital Automatic Flight Control System (DAFCS 3.2)
- Includes fixes from MH-47G & Intl DAFCS
- Improved Handling Qualities
- Removal of side-slip sensors
- Roll-wings-level function; Shipboard mode
- Flight test – ongoing
- Fielding – Spring CY 19

### Common Avionics Architecture System (CAAS 9.4)
- ADS-B Out, BFT II, Integrated ASE
- Improved HUD (head tracker, color display)
- Terrain Profile, Improved Hover Page
- Flight test – Fall CY 17
- Fielding – Winter CY 19
# Army’s Heavy Lift In OFS/OIR

As of 15 August 2017

## Preset

<table>
<thead>
<tr>
<th>Unit</th>
<th>AC</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>2-238th IL/SC ARNG</td>
<td>F</td>
<td>May-17</td>
</tr>
<tr>
<td>1-126th CA ARNG</td>
<td>F</td>
<td>Jun-17</td>
</tr>
<tr>
<td>2-3RD GSAB</td>
<td>F</td>
<td>Jul-17</td>
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## RESET

1 Remaining

<table>
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<tr>
<th># AC</th>
<th>Unit</th>
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<tbody>
<tr>
<td>1</td>
<td>6-101st</td>
<td>F</td>
</tr>
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## Currently Deployed: 33

<table>
<thead>
<tr>
<th>UNIT</th>
<th>AC</th>
<th>Monthly Hours</th>
<th>OPTEMPO</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-149th TX/OK ARNG</td>
<td>12 F’s</td>
<td>259</td>
<td>22</td>
<td>1,573</td>
</tr>
<tr>
<td>1-52th GSAB</td>
<td>7 F’s</td>
<td>320</td>
<td>46</td>
<td>1,585</td>
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<tr>
<td>3-126th MD/NY ARNG</td>
<td>6 F’s</td>
<td>192</td>
<td>32</td>
<td>888</td>
</tr>
<tr>
<td>7-158th KS USAR</td>
<td>8 F’s</td>
<td>464</td>
<td>58</td>
<td>1,808</td>
</tr>
</tbody>
</table>

**TOTAL HOURS:** 298,142  
**MC:** 70%  
**OPTEMPO:** 36 hrs
• T-55 Engine CCAD/Honeywell Partnership
  • 1100 Engines produced since 2005
  • Tiered Maintenance Program:
    - FY 17: 45 Ovhl Engines: 7 Minor, 3 Major
    - FY 18: 40 Ovhl Engines: 1 Minor, 1 Major
  • Honeywell supports CCAD in overhaul of T55 engines
    - Provide Technical, Engineering and Logistical Supplies and Services (TELSS)
    - Provide repair parts via kits
    - Maintain and increase core depot logistics capabilities
• Engine Component Programs
  - 17 Programs for FY 17
  - 24 Programs for FY 18
• Current contract W58 W58RGZ-11-C-0039 expires 28 Feb 2018

• Follow on contract estimated award date of 1 Mar 2018

• Contract scheduled to transition from TELSS support 1 Mar 2019

• Depot production piece part support will return to AMCOM, DLA and other applicable sources of supply

• OEM engineering support will remain in place at a reduced capacity
CCAD / Cargo PM Teaming
Airframe

- 60 programs for FY 17 - 33% of programs maintaining warm production base at the depot
- 60 programs for FY 18 - 33% of programs maintaining warm production base at the depot
- F Model Component Programs:
  - Engine Control Lever (145ES010-8; M456) – Pilot program scheduled for FY 18
  - Integrated Lower Control Actuator (145H7300-31; M639)
  - Extensible Link (145H7350-17; M745)
• Contract W58RGZ-15-D-D-0060 expires 31 October 2019

• Boeing provides Technical, Engineering, & Logistical Supplies and Services (TELSS) in support of airframe and component overhaul programs for the Apache and Chinook platforms

• Contract on schedule to transition from TELSS 1 November 2019

• Depot production piece part support will return to AMCOM, DLA and other applicable sources of supply

• OEM Engineering/CFSR support will remain in place at reduced capacity
Questions