



UNITED STATES ARMY AVIATION CENTER OF EXCELLENCE



Army Aviation Capability Developer MAR Perspective

*Mr. Glenn D. Harrison
Deputy Director
Concepts and Requirements*

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Purpose



Provide feedback on potential MAR technology benefits to Aviation Integrated Priority List 'emphasis areas'.



Prioritized Aviation Emphasis Areas



1. Aviation operational availability, mission reliability, & logistical support systems do not adequately support responsive & affordable worldwide operations.
 2. Current aircraft systems do not adequately enable safe operations across the range of expected mission conditions (adverse environmental conditions, complex terrain).
 3. Aviation survivability and reaction time are insufficient against unpredictable and hard to detect threats.
 4. Aviation flexibility and responsiveness to the commander's needs are reduced by an insufficient ability to communicate over extended distances; in the presence of jamming / countermeasures; and by inadequate interoperability with the battle command system.
 5. Aircraft flight performance (range / lift / endurance / responsiveness) is not fully consistent with future force requirements.
- ★-MAR has potential to improve capability area, however, will not mitigate entire gap.



Prioritized Aviation Emphasis Areas



6. The effectiveness of Aviation reconnaissance, surveillance, and target acquisition is limited by the inability to detect and identify low signature / short-dwell / time-sensitive targets and by the inability to rapidly report target information.
7. Effective Aviation operations are limited by an inadequate ability to operate in high crew workload conditions, high stress and extended duration operations.
8. Aviation weapon systems lack sufficient range, lethality, accuracy, and / or responsiveness to engage diverse target sets in the future operational environment at survivable standoff ranges.
9. The inability of Army Air Traffic Services to receive or contribute to a complete and accurate (non-line-of-sight / low level) air picture impacts safe operations and the ability to conduct effective joint sustained and simultaneous operations.
10. The inability to conduct mounted vertical maneuver with medium weight combat vehicles / sustainment loads and current heavy lift aircraft reliance on prepared landing surfaces reduces the flexibility and responsiveness of the Brigade Combat Team.

★-MAR has potential to improve capability area, however, will not mitigate entire gap.

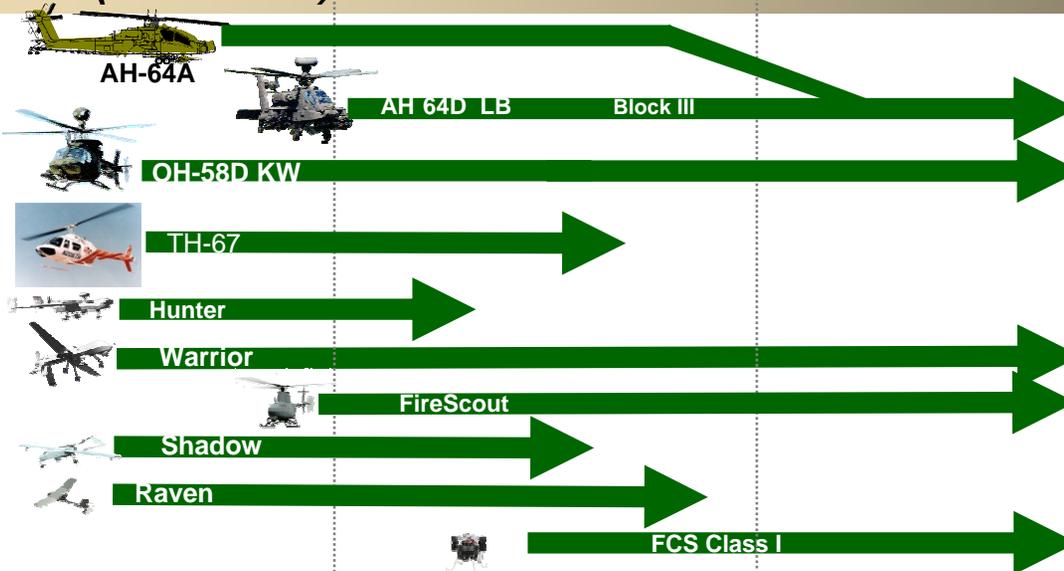


Future Roadmap



MISSION (FY08-09) (Near Term) (FY10-15) The POM Years (FY16-24) The EPP Years FY 2025 and Beyond

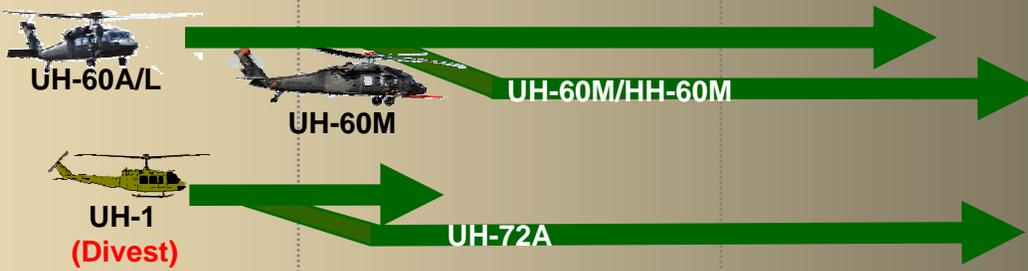
ATTACK/ RECON



2025 Timeframe

- AH64/KW replacement
 - Smaller, lighter, more affordable
 - Integrated approach to survivability
 - Optionally manned
- Manned-Unmanned complementary MEP and weapons
- UAS autonomy/FBCT objective UAS systems

UTILITY



2030 Timeframe

- UH-60 Replacement
 - 6K/95° flight performance
 - Extend Life of UH-60M
- Replace LUH with COTS

CARGO/ HVY LIFT



2035 Timeframe

- CH-47 Replacement
 - Common MEP/ components
 - 6K/95° flight performance
 - Leverage JHL tech demo



CRD Key Contacts



Mailing Address:

ATZQ-CD

ATTN:

Fort Rucker, AL 36362

Telephone

(334)255-9114

DSN 558-9114

Director
COL Joseph Jellison
334-255-3203
Joseph.jellison@conus.army.mil

Deputy Director
Mr. Harrison
334-255-2703
glenn.d.harrison@conus.army.mil

SGM
SGM Shoemake
335-255-2849
matthew.todd.shoemake@

Concepts Development Division

LTC Bishop
334-255-1451

anthony.bishop@conus.army.mil

Requirements Determination Division

LTC Wittges
334-255-3653

charles.wittges@conus.army.mil

Organization / Force Development Division

LTC Matthew
334-255-2220

joseph.matthew@conus.army.mil

Air Maneuver Battle Lab

LTC Ash
334-255-3420

jennifer.ash@conus.army.mil