



How current challenges are affecting operational helicopter capabilities

Col Krzysztof KWIATKOWSKI
Chief of Combat Aviation Helicopter Branch



AGENDA:

- The past, present and future operational capabilities;
- New generation helicopter platforms;
- Polish replacement program.

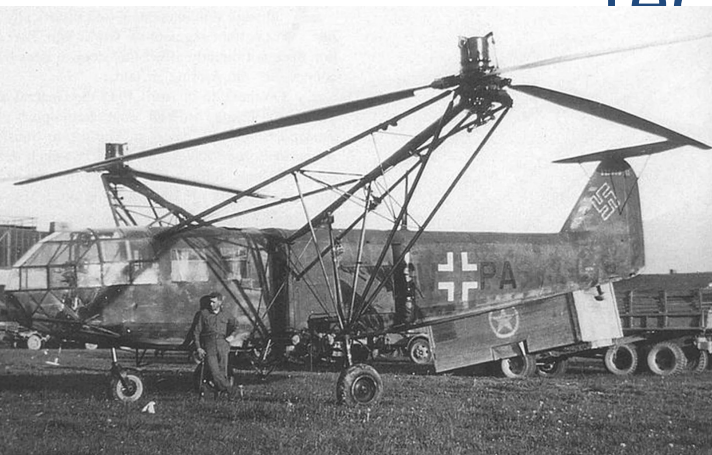


From Experimentation to Dominance on the Battlefield

- development of helicopter technology
- changes the geometry of the battlefield



XX Century changes: + technological progress





Changes in Battlefield Geometry:

Lessons learned from the first helicopter battle
Future of helicopter warfare in modern conflicts



New generation helicopter platforms:

NGRC Project

FLRAA Project

MOSA

New armament



Platforms

NATO Next Generation Rotorcraft Capability (NGRC) Requirements

Participating Nations

France Germany Greece Italy Netherlands United Kingdom

Piloting
Optionally remote capability

Range
> 900nm unrefueled

Interoperability
Modular Open System Approach (MOSA)

Cruise Speed
220+ kts, minimum 180 kts

Transport Capacity
12-16 combat-equipped troops

Shipboard Operations
Main and tail rotor fold capability with dimensions no larger than the NH90 or AW101

Lift Capacity
>4,000kg combined
2,500kg internal

Maximum Takeoff Gross Weight
10,000kg - 17,000kg

Cost
Fly-away cost not to exceed EUR35 million and EUR10,000 per flight hour

2024 Forecast International ©

FLRAA

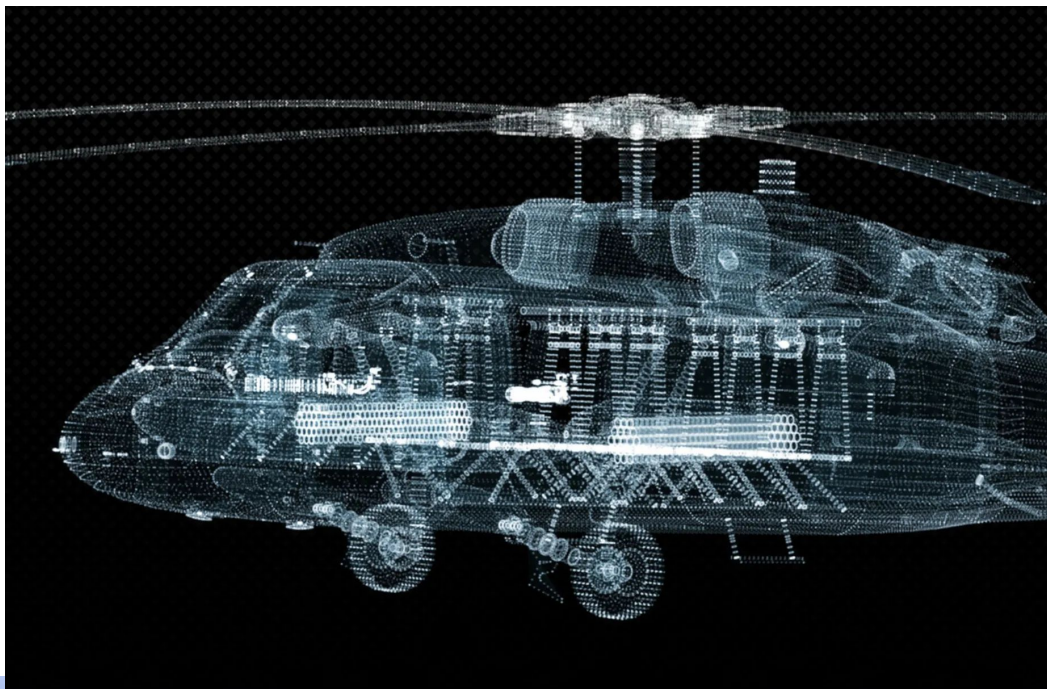


- Easy to Fight & Lethal
- Easy to Sustain
- Easy to Advance

LASSIFIED



Systems



RAFAEL

SPIKE
Game Changer

- Stand Off Range
- Accuracy
- Lethality

JAGM-MR Joint Air-to-Ground Missile-Medium Range

UNCLASS

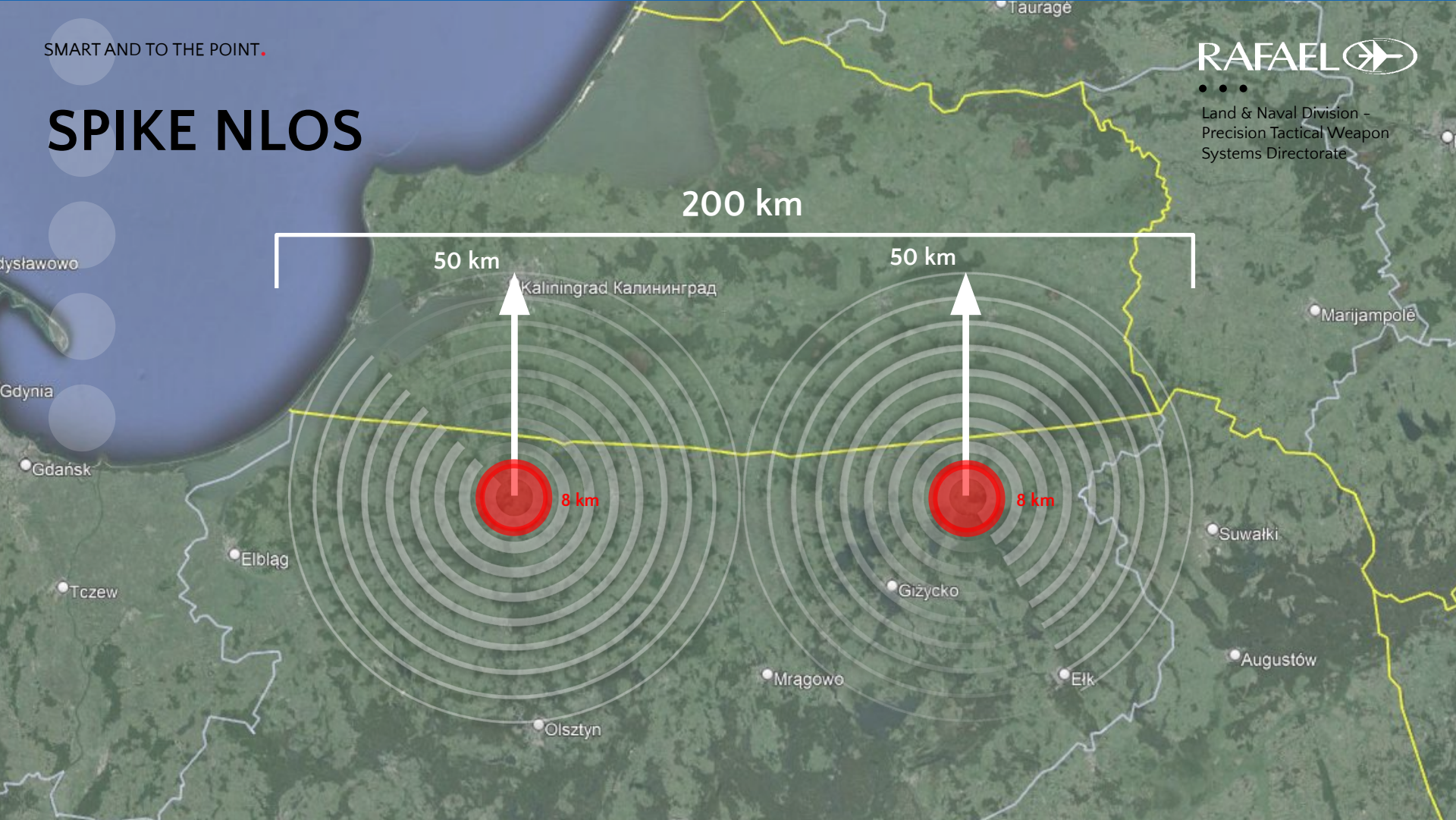
LOCKHEED MARTIN

Lockheed Martin is currently engaged in proof of concept testing and evaluation.

SMART AND TO THE POINT.

SPIKE NLOS

Land & Naval Division -
Precision Tactical Weapon
Systems Directorate





General Command of the Polish Armed Forces



Air Force Inspectorate

Replacement of helicopter fleet



UNCLASSIFIED

24th October 2024

Smiglowiec AH-64E Guardian



IMPLEMENTATION

➤ Timeframe:

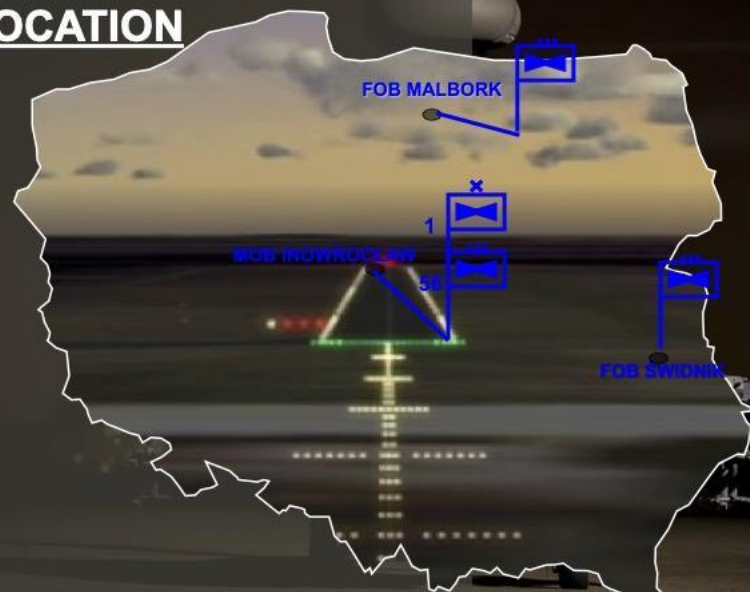
- 2025
 - 8 x AH-64D;
- 2028-2032
 - 96 x AH-64E.

➤ Challenges:

- Infrastructure;
- Human resources.



LOCATION



1 ARMY AVIATION BRIGADE

THE 1 ARMY AVIATION BRIGADE
IS DESIGNED TO PROVIDE SUPPORT
FOR LAND FORCES
IN WIDE SPECTRUM OF MILITARY OPERATIONS:

FIRE SUPPORT: CCA / CAS
PERSONNEL RECOVERY: CR / CSAR
UTILITY: AIR RECCE / TRANSPORT / MEDEVAC



NATO UNCLASSIFIED

➤ 2023-2025:

- Defense Language Institute – San Anotnio AFB (8 weeks);
- 20 pilots – AQC Course Ft. Novosel;
- 2 IP, 2 MTP;
- 22 maintainers – Ft. Eustis.

➤ 2026 -

- 25 PILOTS (3 IP, 2 MTP);
- 106 maintainers.





General Command of the Polish Armed Forces



Air Force Inspectorate

QUESTIONS / ANSWERS



UNCLASSIFIED

24th October 2024