Strategy and future of military helicopters

AIRBUS HELICOPTERS

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Airbus Helicopters at a glance A unique global presence

6,251 B_€ Revenues in 2020 **3,084** Operators

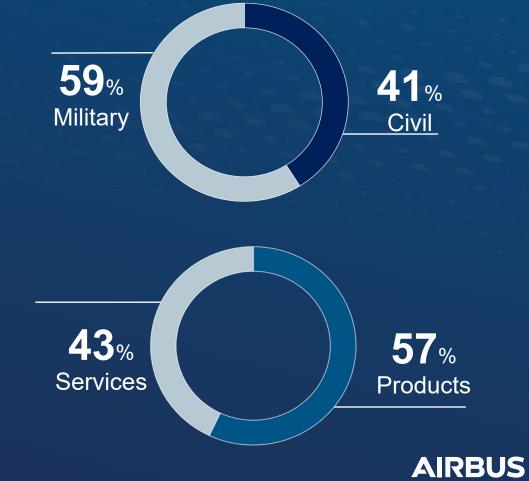


30 Customer Centres and affiliated sites 20,026 Employees





Revenue split in 2020







The widest military range

More than 2 500 military helicopters in-service and 30,000,000 cumulated FH.

165 military customers worldwide trust Airbus helicopters to get the job done.

Military market accounts for ~50% of Airbus Helicopters revenues





Our vision for the future

- Short, mid and, long-term perspectives
- Prepare new generation of helicopters
- Support the Forces and anticipate their needs







Short term: H225M

Market reference for CSAR and special operations: More than 125 units in service.

Kuwait, Singapore, Hungary, and France are among recent customers.

New avionics and sensors available.

Airbus will keep investing in H225M improvements.





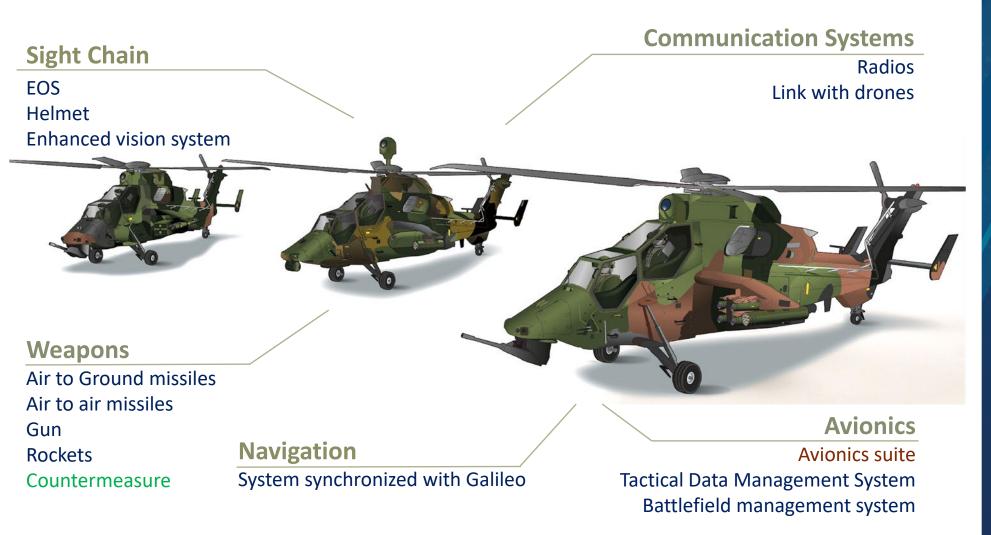


Successful H160 sand trials in Morocco. IBF proved to be very efficient.

Sling, hoist and blade folding trials conducted in 2021 on H160.

Contract with French Ministry of Armed Forces to be signed by the end of 2021.

Major systems considered within Tiger MkIII



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Mid term: Tiger MkIII

The Best attack helicopter in the world

AIRBUS

Agility

Survivability

Precision

Fire power

Always as agile, more efficient, more connected and better protected.

88





Mid term: Expand our military offer -H175M

The world's most capable Super Medium helicopter.

7-8t maximum weight.

Limited footprint for operations in confined areas.

Transportable in the A400M.

Spacious cabin

Large doors to facilitate ingress and egress.







Mid term: NH90 new Standard

Special Forces version for France.

New-generation EOS EuroFLIR™.

New generation digital 3D map.

Folding boarding steps.

Additional ceiling-mounted rope anchor points.

NHI Transformation Plan to improve availability.







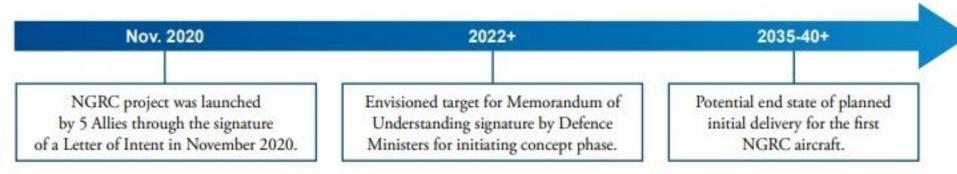
Mid term: VSR700

2021: Flight envelope expanded to 80 kts with a complete operative mission system.

2022: Sea demonstrations.







Long term: Building the Future

Prepare next generation of Tactical Transport/Naval helicopter.

Industrial challenges : More than 900 helicopters to be replaced by 2040.

Long term: NGRC Specification

The NGRC requirements specify an aircraft in mission configuration with a cruise speed of 220 Kts or more but not less than 180 Kts. It means :

- MTOW significantly increased at iso-cabin & payload (min +30% weight penalty, 11t to 15t)
- Increased Complexity : adding wings, mechanisms, actuators, high power
- Increased Costs (operational costs likely higher by 25%)

Rotorcraft cruise speed capability thresholds:

Formulas	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	As ^{cruise} (kts)
A Co	С	lassical	нс													
1 - b				« Reco	rd » HC											
-						H	ybrid/Co	ompoun	d Helico	pters						
to the									Tilt	t-rotor &	Tilt-win	g				
													l	Jsual	Conditi	onal

- Airbus is ready to meet military customers speed requirements if confirmed
- NATO members have to converge on the operational needs and associate trade offs before finalizing NGRC specification..
- Concept phase in 2022 should clarify the true sizing criteria for the fields of operation.

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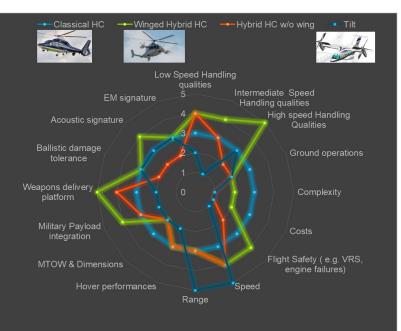
Long term: NGRC Specification

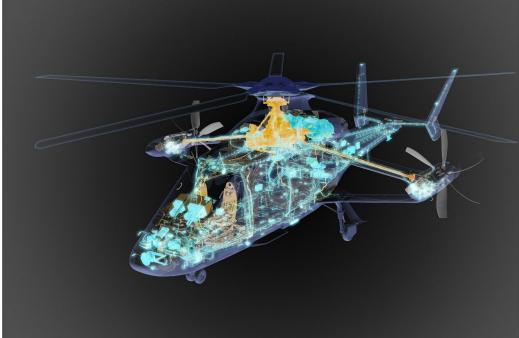
Airbus Helicopters already has the technologies and expertise to fulfil NATO requirements with the Racer concept or an upgrade of existing military helicopters with specific mission configurations.

Long term: Address the expected concepts of operations

Concept of Operations is KEY to defining Next Generation 2040+ rotorcraft:

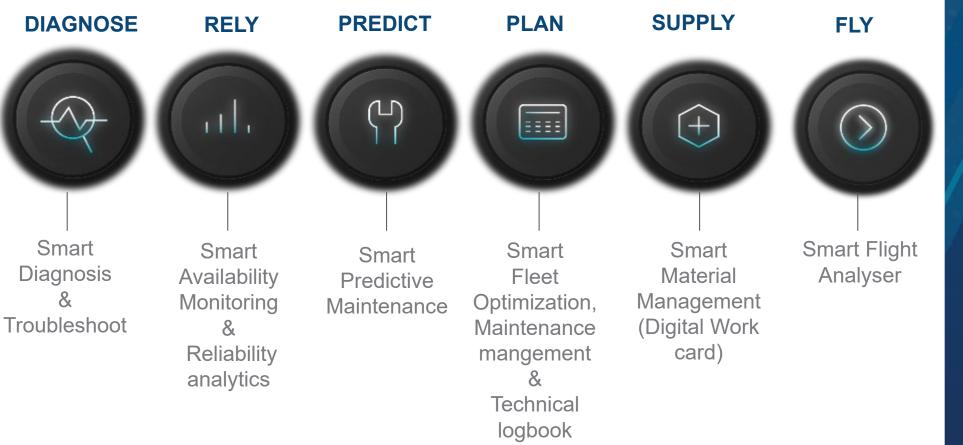
- Mission performance
- Survivability
- Affordability
- Availability
- Compatibility with overall 2040+ defense system.







SMARTFORCE CONNECTED SERVICES HELICOPTERS – PORTFOLIO



Smart Force

An Airbus group global approach.

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BRIEFING

- Airbus Helicopters and Airbus DS / Military Services interoperability.
- OEM expertise to optimize availability, maintenance and operating costs.





Military Global support Contracts

More than half of all Airbus helicopters enrolled with global support contracts come from military fleets.

Main objectives of this contract aim to :

- secure spare parts availability on stock,
- reduce maintenance turn times,
- secure fleet availability.

Accepts specific performance objectives and obligations leveraging on AH's technical, logistic and data analytics expertise.