

HELICOPTERS















# SEARCH AND RESCUE

#### Be prepared for the unexpected...

...as there is always the need to rescue anyone, at anytime, anywhere.

In times of uncertainty with lives at risk, helicopters allows to **search** for the precise location of people in distress or imminent danger, **rescue** and transport them to a place of safety.





Helicopters provide an **added value** to the successful completion of missions

- **3 to 5 times faster** reactivity in locating and reaching victims compared to road units
- Providing access to hostile environments and locations otherwise inaccessible by any other means of transport
- > Which improve significantly the survival rate
- Improving time and resource efficiency by **combining the search and rescue** functionalities
- With better global assessment of the situation to identify any particular or possible additional dangers that could affect the mission (e.g. obstacles)

# MISSION EFFICIENCY

# MAIN MISSIONS

Helicopters are **performing Search And Rescue missions in various areas :** maritime, coastal and in land

These missions are operated **all year round**, **24/7**, **day & night**. Therefore, helicopters have to be ready at anytime.

Several different actors are involved in Search And Rescue, **depending on the country and specific areas:** 

- $\cdot$  Armed forces, ministries, police
- $\cdot$  Counties / regions
- · Private under contract operators

## Environments in which helicopters are operating



Hostile Environment (island, jungle, mountain, forest,...)



**Urban Area / Traffic** 



Rough Sea (high winds, storms, strong current, big waves,...)



Night time / poor visibility

# **EQUIPMENT**



**SEARCH LIGHT** 



HOIST



**CARGO HOOK** 



**SEARCH AND** WEATHER RADAR



E.O.S. Electro Optical System

# MAIN EQUIPMENT



STRETCHER



**FLOATS & LIFE RAFT** 



SIREN



**H.E.E.L.S.** Helicopter Emergency Egress Lighting System





TACTICAL RADIO SYSTEM

**A.D.E.L.T.** Automatic Deployable Emergency Locator Transmitter

# A HELICOPTER FOR EVERY MISSION

### Data in baseline configuration

	<b>H125</b> (with dual hydraulics)	H135	<b>H145</b> (with dual hook)	H160	H175	H215	H225	NH90	VSR700
MTOW (internal)	<b>2,370 kg</b> 5,225 lb	<b>2,980 kg</b> 6,570 lb	<b>3,800 kg</b> 8,378 lb	<b>6,050 kg</b> 13,338 lb	<b>7,800 kg</b> 17,196 lb	<b>8,600 kg</b> 18,960 lb	<b>11,160 kg</b> 24,604 lb	<b>11,000 kg</b> 24,250 lb	<b>MAUW</b> <b>700 kg</b> 1543 lb
External load	<b>1,400 kg</b> 3,086 lb	<b>1,200 kg</b> 2,646 lb	<b>1,600 kg</b> 3,527 lb	<b>1,600 kg</b> 3,527 lb	<b>2,700 kg</b> 5,952 lb	<b>4,500 kg</b> 9,920 lb	<b>4,750 kg</b> 10,472 lb	<b>4,500 kg</b> 9,920 lb	<b>100 kg</b> 220 lb
Seats (up-to)	1 + <b>5</b> 2 + <b>4</b>	1 + <b>7</b> 2 + <b>6</b>	1/2 + <b>8</b> 1/2 + <b>10</b>	1/2 + <b>12</b>	2 + <b>18</b>	1/2 + <b>17/20</b> 1/2 + <b>19/22</b>	1/2 + <b>19</b>	1/2 + <b>20</b>	/
Maximum range	<b>620 km</b> 335 NM	<b>832 km*</b> 449 NM*	<b>812 km*</b> 439 NM*	<b>781 km</b> 422 NM	<b>1,120 km</b> 626 NM	<b>1,241 km*</b> 670 NM*	<b>1,107 km*</b> 598 NM*	<b>900+ km</b> 485+ NM	/
Maximum endurance	4 h 20 min	4 h 46 min* —	4 h 31 min*	4 h 12 min	6 h 09 min	6 h 35 min* —	5 h 32 min* —	5 h 00	10 h 00

MTOW: Maximum Takeoff Weight MAUW: Maximum All Up Weight

\* With auxiliary fuel tank(s)

## VALUE **PROPOSAL**

### Different helicopter types to cover all missions spectrum

	H125	H135	H145	H160	H175	H215	H225	NH90
Basic day/night inland and mountain SAR	٠	٠	٠	٠	٠	٠	٠	٠
Basic day/night coastal and maritime SAR	٠	٠	٠	٠	٠	٠	٠	٠
24h long range specialized and versatile SAR				٠	٠	٠	٠	٠
24h all weather extended range specialized SAR						٠	•	٠

## AIRCRAFT ROA FOR MARITIME OPERATIONS

Airbus families are able to perform from short to long range maritime SAR missions





THE PERFECT SWISS KNIFE Supported by a strong experience

Proven reliability with 4000+ H/C in service

Compact, flexible light helicopter with the mission capability of a larger aircraft

Exceptional performances in harsh environments

Lowest acquisition and running costs





THE LIFE SAVER

The best fit to perform mountain rescue in restricted areas

#### Proven platform,

- always ready:
- · 1,473 H135 delivered,
- 6.6M FH,
- · 316 operators,
- · 65 countries\*

Ability to operate safely in confined areas : lowest D-Value & downwash in its category

Helionix<sup>®</sup>: reduced pilot workload

360° approachability

Disaster management: Easily installable/ removable (~15 min), 1 to 2 stretchers, up to 3-4 seats and 1 medical rack

FH: Flight Hours \* Preliminary figures at end of December, 2022



#### LIKE A GUARDIAN ANGEL

Compatible, versatile & capable

Ability to operate safely in confined areas: lowest downwash in its category, Fenestron<sup>®</sup>

Helionix<sup>®</sup>: Drastic reduction of pilot workload

95% availability

**Competitive payload** 

Disaster management: Easily installable / removable (~15 min), 1 to 2 foldable stretchers, 2 up to 6 seats to complement EMS kit

High & hot performer

Large and usable interior volume for equipment and personnel

Wide side doors and rear clamshell doors for loading/unloading







#### YOUR PARTNER TO SAVE LIFE

Focus on mission efficiency in critical environments

#### Designed for the crew and the maintainer

· Help them in their tasks

#### All missions ready, one fits all

· Versatility and availability

#### Safety enhancer

- Reduce workload with the latest generation of avionics and AFCS
- 6 rescuees @150 NM ISA+20°

#### FIRST RESPONDER FOR SAR MISSIONS

Stay focused in the most demanding environment Precision and stability – Faster and Further



### Stay focused in the most demanding environment

• Due to the world's most advanced avionics suite: Helionix®

#### **Precision & Stability**

- Unique precision and stability: 4-axis autopilot
- The large cabin is enhanced by very low vibrations levels and smooth ride – even at high speed

#### Faster, Further, Longer

- · Fast start-up: in less than 5 minutes
- · Be on scene faster @150 kts
- · Rescue up to 270 nautical miles
- $\cdot$  Best endurance above 5 hours



### H215 A VALUABLE SAR ASSET Unmatched mission efficiency to save & protect

Optimized crew workload and situation awareness

**Unmatched mission efficiency** 

Long range & endurance

Unrivalled autopilot precision & SAR upper modes

**All-weather conditions** 

Large reconfigurable cabin

### THE WORLDWIDE REFERENCE FOR SAR MISSIONS

Selected & operated by over 20 countries

### Unrivalled SAR autopilot modes & assistance

Less crew fatigue

More comfort & recovery

Real time power margin displays

Excellent payload lift and range capabilities for highly demanding SAR missions



### NH90TTH&NFH

#### EFFECTIVE, MODERN AND INNOVATIVE

Unique, fully integrated mission system for operations in the most demanding conditions over land and sea, day & night.



Advanced mission flight aid

Exceptional agility from Fly-by-Wire control + 4-axis autopilot

Automatic search patterns and transitions to & from headwind hovering in the whole flight envelope

Winchman trim mode with an authority of +/- 20 kts 360°

Modular and wide cabin for SAR, disaster relief

Reduced footprint (adapted to confined and urban environment rescue missions) & low downwash



# **VSR700**

THE FUTURE OF SAR ENHANCED, EFFICIENT & EFFECTIVE In service by mid/end of the 2020s

700 kg MAUW\*, 10 hours endurance with 100 kg payload

Mobile & transportable

Operate from ships or shore - anywhere

Can be embarked in ships > about 60 m

**High precision landing** 

Full capacity sensors tailored to the mission

## **THE WORLD'S LEADING** HELICOPTER MANUFACTURER

#### TO SUPPORT THE SEARCH AND RESCUE COMMUNITY

Based on 60 years of experience saving lives, Airbus is always ready to provide the right customized solution you need, with the widest range of products and solutions and a large choice of equipment adapted to SAR missions





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The printing inks use organic pigments or minerals. There are no use of basic dyes or dangerous metals from the cadmium, lead, mercury or hexavalent chromium group.

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