

Oil & Gas Mission



thinking without limits



The value of experience

30 years of global operations have made Eurocopter the number one partner for offshore petroleum and gas companies.

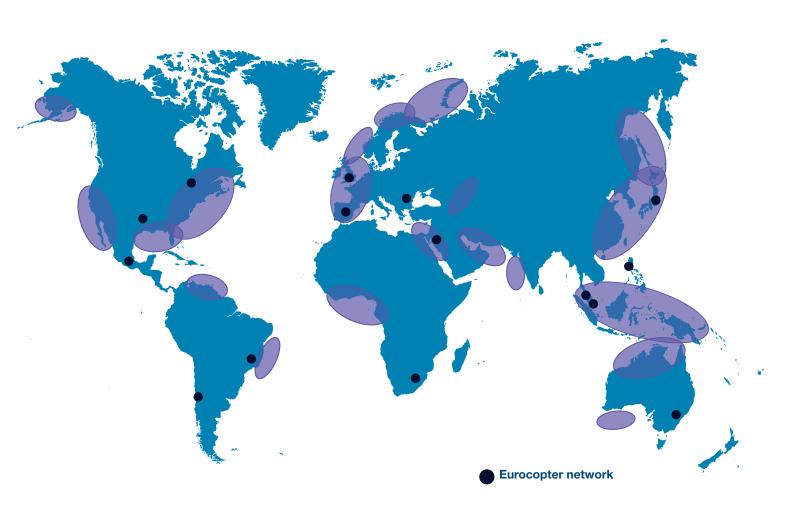
Our new line of aircraft, the widest and latest on the market, is built on our extensive experience (6.1 million total flight hours) and our in-depth knowledge of your business needs.

Our aircraft are designed to satisfy all your operational requirements, providing the latest avionics technology, high levels of safety and service, and unmatched profitability. Global oil and gas market



Inspired and guided by its unique experience in the oil and gas business, Eurocopter has developed the widest product line available to satisfy the strictest specifications of operators in an increasingly competitive market.

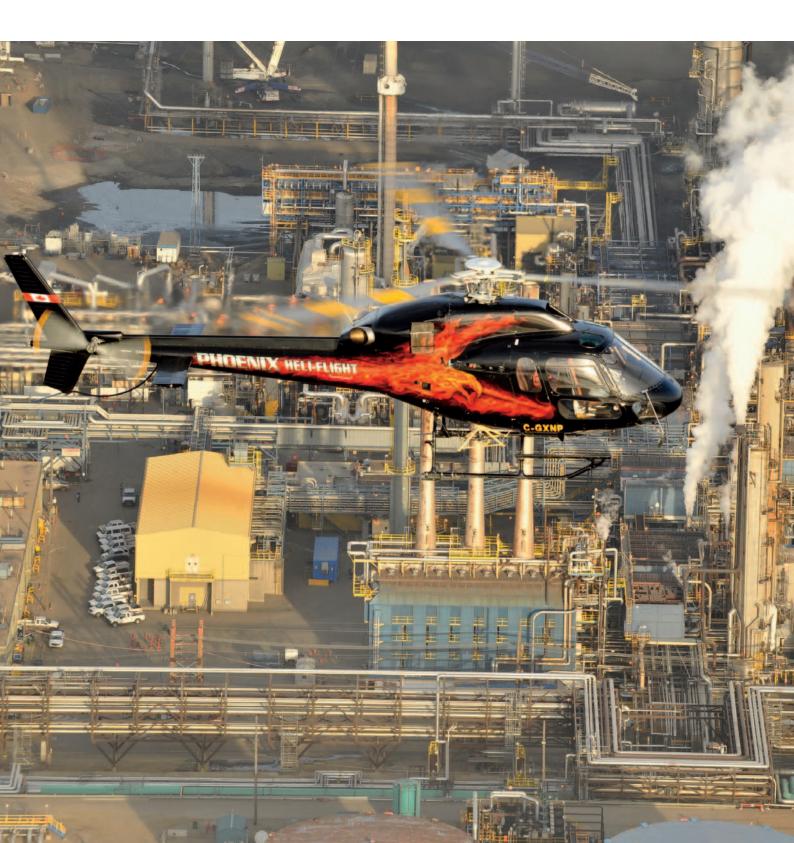
The autonomy, performance and equipment of Eurocopter helicopters make them perfectly adaptable to all the missions they must perform: short or long-haul flights, transportation of passengers or cargo, and special operations requiring specific equipment. And that in all weather conditions.



Light Twin engine helicopters AS355 N / EC135 / EC145 Small decks, short distance

A winning combination of simplicity and high technology make the aircraft in Eurocopter's twin-engine line particularly suited to offshore operations on small helipads.

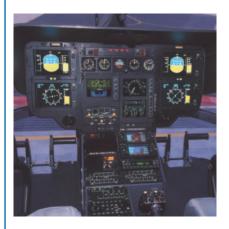
The AS355 N, EC135 and EC145 provide you with low costs, safety, comfort and operational efficiency.





Record low costs

Simplicity and technology: That is how **Eurocopter manages to reduce your operating costs** to record low levels for its entire line of twin-engine offshore aircraft. From this point of view the **AS355 is a model of excellence:** easy access to parts, proven reliability and wide versatility keep downtime to a minimum. **The EC135 and EC145 benefit from the latest technological innovations** which notably reduce maintenance costs.



A reputation for safety

Building on its global reputation for safety, the twin engine series line goes one step further by integrating the latest technologies, in terms of:

- Excellent single engine performance
- Engine control: FADEC (EC135)
- Man-machine interface: Integrated Fligt Display with VEMD[®] (EC135 & EC145)

On the EC135, the Fenestron[®] and the high main rotor significantly improve safety for passengers and ground personnel during take-off, landing, and low-altitude maneuvers. The cockpit design gives and unmatched field view for pilots.



EC135 & EC145 's unique features



All-around Comfort

Vast and spacious cabins, flat floors, easy accesses make these aircraft highly versatile. The interior configuration can be easily modified to suit specific needs (passenger or cargo transport). In addition, the EC135 and EC145 fitted with rear clamshell doors can carry bulky loads.





For small helidecks

The AS355 N suits perfectly to frequent trips on short distances. It meets all JAR OPS 3 regulation requirements for one engine inoperative performance. It is fully IFR certified and can be equipped with a 3-axis autopilot. And best of all, it is the most affordable twin engine helicopter in its class.

Medium twin engine helicopters AS365 N3 / EC155 B1 Medium decks, medium distance

The AS365 N3 has built for many decades a universal reputation for performance and reliability. Eurocopter leant on this solid experience to develop the EC155 B1 that sets new standards for excellence. With two new Turbomeca Arriel 2C2 engines providing 10% additional power, the lowest noise level in its category, unrivalled conditions of comfort, a transport capacity increased to 13 passengers, and state-of-the-art avionics, the EC155 B1 is the benchmark of the industry.





EC155 B1

Technology EC155 B1

- Spheriflex[®] : a fully proven technology 5 bladed main rotor system
 - simple design
 - high performance
 - low vibration level
 - ease of maintenance
 - manually foldable
 - low noise signature
 - rotor engagement in winds of up to 50 kts (fwd sec)
- Blades : all composite material
 - simple design
 - rugged
 - corrosion-free
 - fail-safe
 - multi-box structure
 - High set main rotor: enhanced safety for passengers and ground personnel
- Fenestron[®]: 30 years of technology

- reduced signature

- improved damage tolerance
- increased safety
- reduced maintenance

• EC155 B1 Engine : Turbomeca Arriel 2C2 FADEC system :

automatic reconfiguration in case of single channel failure and manual reconfiguration after dual channel failure on one FADEC.



EC155 B1

State-of-the-art Avionics

- Integrated Flight and Display System (Primary Flight and Navigation Displays)
- VEMD: Vehicle and Engine Multi function Displays
- Computes and displays the main vehicle and engine parameters
 First limitation indication
- Centralized Alarm Display
 - Amber warnings and advisories
- Fuel management (quantity, flow and pressure)





ADELT

Offshore Equipment

- Radar altimeter, AVAD, TCAS
- HEEL : Emergency exit lighting
- ADELT
- HUMS : Integrated maintenance assistance system based on data recording and pro-active monitoring for flight safety enhancement
- Emergency floats with automatic inflation on contact with water
- Life rafts (2 x 10 pax)

Additional Offshore Equipment

- Electrical rescue hoist Capacity: 272 kg / 600 lb Cable lenght: 90 m / 295 ft
- Cargo sling with dynamometer Capacity: 1,600 kg / 3,527 lb



AS365 N3: high performance

- Starflex[®] type rotor head with 4 fibreglass blades
- Ease of maintenance
- Simple design
- High performance
- Manually foldable
- Low noise signature
- Rotor engagement in winds of up to 55 kts (fwd sec)

Heavy helicopters AS332 L1 / AS332 L2

Large decks, long distance, cold weather

About 70% of the civilian AS332 fleet is operated by oil and gas operators. This high success shows the perfect adaptation of the 8-9 ton class Super-Puma for this dedicated mission. Thanks to this fleet, Eurocopter has been able to gather a long experience and could develop the AS322 L2 that presents higher performance.



AS332 L2 Enhanced performance

The AS332 L2 relies on the proven experience of the AS332 L1, while integrating advanced technologies.

Modern avionics

- EFIS instrumentation



More capacity



• More power 2 Turbomeca Makila 1A2 turbine engines



AS332 L1



AS332 L2

Cabin comfort

- Low vibration level
- Enhanced sound proofing
- Large windows
- Easy access
- Reclining seat backs
- In flight entertainment
- 3 point safety belt
- Head rest

Modern Cockpit

- High visibility
- Ergonomic design

Luggage compartment

- 3 storage rooms
- Easy direct access
- Up to 2.2 m3 (400kg) storage capacity



Easy loading bulky cargo

True allweather IFR

- Complete equipment
- Certified systems
- Fail safe concept

Crashworthy design

- Main frame
- Tail boom
- Transmission deck
- Cockpit floor
- Part of the fuselage
- High energy absorption landing gear
- Fuel / hydraulic piping

Full de icing-system

(flight in known icing conditions)

- Rotor blades
- Engine air intakes
- Stabilizer
- Windshields

Heavy helicopters

Large decks, long distance, cold weather

Based on the AS332 L2, which has an established reputation among offshore operators, the new Eurocopter EC225 features multiple technical innovations and increased passenger comfort. The EC225 can transport heavier payloads over greater distances and at higher speed, generating very low costs. A low vibration level and staggered, energy absorbing seats which increase shoulder room between passengers make the vast cabin a relaxing and safe space for passengers and crew.



Cabin

- Wide cabin and cargo compartment
- Large unobstructed cabin
- Enlarged windows









Technology

- Spheriflex[®] : a fully proven technology 5-bladed Spheriflex[®], main rotor system
 - Very low vibration level
 - High performance
 - Ease of maintenance
- New Main Gear Box : AS332 L2's main gear box reinforced by deep nitrogen hardening of the driving input bevel gear, 8% more power
- 30 mn dry run capability, with back-up lubrication
- Spray system, compliant with FAR 29
- New Blade profile :
 - High efficiency Multibox structure
 - Corrosion-free
 - Fail-safe
- Lightning protection
- High energy absorption landing gear
- Engine :

Turbomeca MAKILA 2A

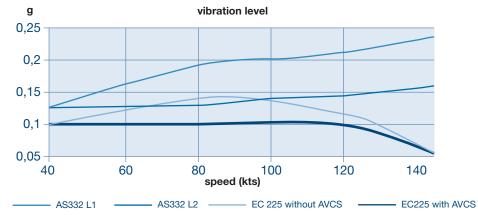
- Blade shedding technology
- 2 dual channel FADEC system : automatic reconfiguration
- Complete de-icing system compliant with FAR/JAR 29 regulations
- Full HUMS[™] system : integrated maintenance assistance system based on data recording and pro-active monitoring for flight safety enhancement.



State-of-the-art Avionics

- Full glass cockpit with state-of-theart AMLCD's (Active Matrix Liquid Crystal Displays)
 - 4 screens 6" x 8" MFDs (Multifunction Displays)
 - 2 screens 4" X 5" VMS
 - (Vehicle Management System) color displays
 - 1 screen 2,4" x 2,4" ISI (Integrated Stand-by Instrument)
- Men Machine Interface
 - New dual duplex 4 axis AFCS,
 - Full flight enveloppe protection
- FADEC™ system.

Extremely low vibration level through the whole flight envelope

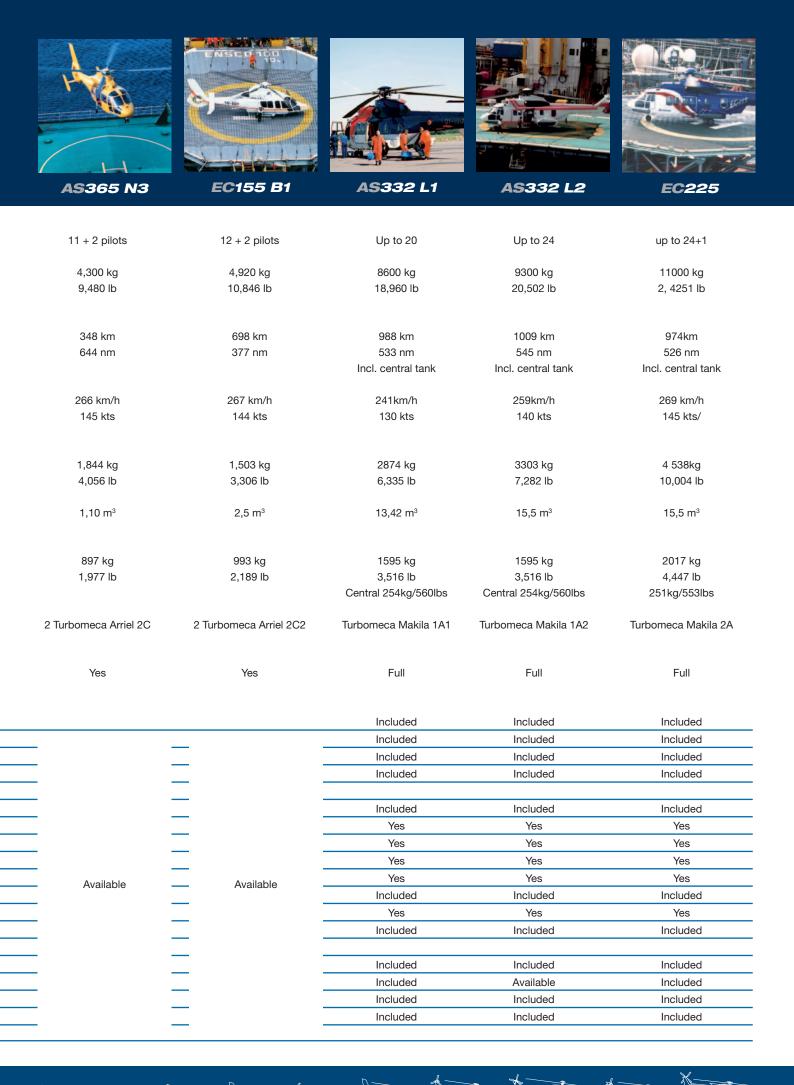






	A5355 NP	EC135	20145
Pax	1+ 5	1 / 2 + 6/5	1/2 + 9/8
		172100	1/2 1 0/0
МТОЖ	2,600 kg	2,910 kg	3,585 kg
	5,732 lb	6,415 lb	7,903 lb
		100 1	
Maximum range at recommended	574 km 310 nm	493 km 266 nm	606 km 325 nm
cruise speed (30 mn reserve) * (no reserve)*	310 mm	200 1111	323 1111
Recommended cruise speed	222 km/h	240 km/h	240 km/h
	120 kts	130 kts	130 kts
	1.100 \	0451	1.007.1
Load (pax and fuel) *	1,163 kg	915 kg	1,307 kg
	2,564 kg	2,013 lb	2,875 lb
Baggage compartment	0.931 m3	Depends on seating	Depends on seating
Standard fuel tank	577 kg	560 kg	694 kg
	1,272 lb	1,235 lb	1,530 lb
Power plant	2 Turbomeca Arrius 1A	2 Turbomeca Arrius 2B2	2 Turbomeca Arrriel 1E2
	2 Turbonneca Annus TA	Or 2 P&W 206 B2	
		0. 1 . 0 100 21	
IFR/VFR/ day and night	Yes	Yes	Yes
Offshore equipment			
Emergency Floats	Available	Available	Available
• Life Rafts	Available	In development	In development
• EGPWS			
• AVAD	NIA	la contification	la soutification
ARHS Free Steering Mode Radar Altimeter w/ Audio Warning	NA Available	In certification Available	In certification Available
Cockpit Door Jettison	Available	Available	Available
Push-out Option for windows	Available	In development	In development
Emergency Exit Lighting	Not required	Available	Available
• HEELS	Not required	In development	In development
• ADELT	In development	In development	In development
Underwater Locator Beacon (ULB)	In development	Available	Available
Search and Weather Radar	Available	Available	Available
Usage Monitoring System (UMS) with Vibration Recording	Available	In development	In development
• ARMS TM /UMS TM			
• TCAS	In development	Available	Available
Public Address System	Not required	Available	Available
Corrosion Prevention Treatment	Available	In development	In development
Anti-Corrosion Treatment Manual	In development	In development	In development

*Equipped according to JAR OPS 3 regulations for hostile environment, Performance calculation 3000ft ISA





A Flexible Package Of Services

Eurocopter is committed to the safe, secure and profitable operation of your fleet. To answer all your specific needs and in addition to our traditional support offer, we have designed a total package of services, which ensure you availability, assistance and cost control.

With this unparalleled service offer, Eurocopter becomes your one-stop source for all your helicopter servicing needs.

A Complete Series of Services Allows you to Customize your Program Depending on the Additional Needs you Have.



Completely flexible, you can add a service at any time depending on your specific requirements or constraints.

Technical Assistance

Based at your premises, our technicians can install equipment, perform maintenance operations or help you in the management of your part inventory. As maintenance experts, they provide you with on-the job training and pass along their know-how and practical experience to your maintenance team.

Customized Master Servicing Recommendations

Through this service, we offer customized maintenance programs focusing on your operations and environment. By optimizing task scheduling and gathering maintenance tasks, we can increase helicopter availability and reduce your labor costs by up to 20 %. We make sure that your customized MSR meets all the airworthiness requirements.





Repair & Overhaul Services Designed with Oil & Gas Operators in Mind!

In this business saving time means saving money. We know that every minute your helicopter spends waiting for service costs you more than just time. We fully understand the importance of keeping your mechanical and equipment systems operating reliably and efficiently. That is why, to best suit your specific needs, Eurocopter has designed three different repair & overhaul program levels. From basic repair by the hour services up to an all-inclusive package with commitment to part availability, each of them is dedicated to answer your business profile.

	Access	Advance	OGAP
Repair by the Hour	•		
Parts by the Hour		•	
Local consignment inventory		•	
Return transport for the core unit		•	
Commitment to fleet availability			•

Included • Optional

• Access

This low cost oriented reference program provides relevant OEM repair and overhaul service by the hour.

Advance

This standard program provides the replacement parts for all D-level repairs and overhauls for dynamic components, blades, basic equipment and life limited parts.

The part is delivered within 48 hours at the closest airport thanks to a dedicated central inventory.

Several options allow you to complete and customize your program.

• Oil & Gas Availability Program (OGAP)

One of the strong points of our offer is undoubtedly the Availability Program. This comprehensive program is based on genuine partnership between you and us. To best adapt your specific needs, we size dedicated inventories at your premises or locally and we set up dedicated logistic means.

In order to guarantee maximum and permanent availability of your fleet, we are committed to operational results.







Training

To assure safety, the Eurocopter Training Services proposes a wide variety of specific mission training for pilots and technicians, and aims to exceed all airworthiness-improving regulation requirements.

Concentrating on professional skills and expertise, pilot training is performed with state-of-the art technology. The use of level-D simulators enables us to create the most realistic conditions possible for offshore flight scenarios, including IFR operations and Crew Resource Management.

Eurocopter training focuses on real situations and operational decision making. Technician training covers new technology systems (VEMD, etc.) and troubleshooting techniques.

Training courses:

• Recurrent Emergency Procedures:

This refresher course progressively covers malfunctions, from minor up to major failures, with application of the appropriate and safe procedures.

• Full IFR:

Qualification of pilots in instrument flights and provides them with the associated handling and skills.

• Recurrent IFR:

Pilot training in IMC (Instrument Meteorological Conditions) and/or when resorting to IFR rules.

- Recurrent Offshore: Onshore and offshore flights or oilrigs or ships are reviewed, focusing on take-off, landing and emergency procedures, up to ditching. All training flights can be performed under various weather conditions, and different sea states.
- Line Oriented Flight Training (LOFT): Training for transition from the simulator to line flying and preparation of crews for acquiring Crew Resource Management (CRM) techniques and skills.
- Simulator Instruction Operating Station (IOS): Qualification of pilots as instructor pilots on the simulator. Instructor pilots are trained in managing all the visual cues available for offshore missions.
- Technician Refresher: Updating of maintenance know-how and maintaining the proficiency level with a special focus on specific systems (new avionics suites, etc.)





In-Service Introduction Package

The arrival of a new helicopter in your fleet often entails adjustments to your organization, learning new maintenance procedures for your technicians, and familiarization with a new piloting environment for your pilots.

The answer to your specific needs of assistance is definitely the in-service introduction package. Designed to help you launch your activities, additional training and technical assistance are proposed. Our technicians offer you on-the-job training to assist recently qualified technicians in their daily work to give them full confidence in the performance of the maintenance tasks.

The additional "line training" performed at your premises fully qualifies your pilots in the operation of a new helicopter in their specific missions and environment.





H.U.M.S Support

This service is essential for customers whose aircraft are equipped with the HUMS systems. Alongside the hardware support and the software maintenance, this service includes a diagnosis service along with assistance in tuning of warning thresholds. A dedicated technical assistance team is at your disposal any time of the day or night for any requests or questions that you might have.







Number one leader in the helicopter industry.

(We must be doing something right.)

With 53% of all worldwide civil and parapublic helicopter deliveries, and 15% of worldwide military orders, Eurocopter is world leader in the design, manufacture and maintenance of rotary-wing aircraft

We owe our success to our clients, of course, and to five simple precepts:

First, safety. Safety has always been, and will always be, the top priority for Eurocopter.

Second, we work hard to understand your needs. Our mission is to provide helicopters tailor-made and fully equipped to suit your specific requirements.

Third, Eurocopter sells and supports the broadest range of helicopters offered by any manufacturer. We can fulfill any conceivable mission, whether it is law enforcement, Emergency Medical Services, personnel or cargo transport to offshore oil and gas platforms in any weather, or ferrying corporate officers and VIPs in the utmost comfort. Fourth, meeting our clients' demands during more than 43 million flight-hours has driven our R&D engineers to an impressive number of technological firsts in order to make our helicopters safer, lighter, quieter, more durable, as well as easier and more economical to operate and maintain.

And fifth, Eurocopter is equipped to give you the individual attention, service and support you require. We have over 14,000 employees in 140 countries (more than any other manufacturer) serving our 2,800 clients and their 10,000-odd helicopters currently flying. The right help is always there when you need it, from component repair and overhaul services to parts and spares-support and training programs.

Created in 1992 from the merger of two existing helicopter manufacturers, Eurocopter is today a wholly-owned subsidiary of EADS, the European Aeronautic, Defence and Space Company, one of the two largest aerospace groups in the world. Which is a sixth reason for doing business with Eurocopter – you can count on us to be around for a very long time.











www.eurocopter.com