ACH

CORPORATE
HELICOPTERS

ACH135

Technical Description

2023

AIRBUS

Contents

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1 Foreword

Figure 1.1: Example of the ACH135®

Efficient, reliable - and affordable

The ACH135 newly equipped with Helionix® is Airbus® 3 ton class light twin Best Seller.

It represents the perfect balance between flight performance, flight safety, reliability and cost of operations while maintaining its unmatchable agility.

You can expect advantages in every aspect of ownership, from the moment you purchase to the day you realize its higher residual value.

The ACH135 delivers exceptional power reserves including full class 1 and 2 performance, enhanced safety margins, best in class payload and the industry benchmark in precision and control.

Quietest in its class

Thanks to its all composite main rotor blades with advanced tip geometry design and Airbus Fenestron® anti-torque system, its sound signature is well below the ultra-stringent ICAO limit causing least disturbance to residences or businesses in the operating area.

Safety by design

The ACH135 is certified to the latest CS 27/FAR27 standards including energy absorbing fuselage, seats and crash resistant fuel cells. The safety of twin engine performance is complemented with redundancy incorporated in the hydraulics, electrics, main transmission oil cooling and lubrication systems.

The innovative Helionix flight deck has an open architecture and modular design with dual duplex redundancy incorporating embedded functions. It features advanced intuitive software and a four axis autopilot with complete envelope protection for ultimate precision and control with lowest pilot workload.

The ACH135 can be powered by either Safran Helicopter Engines Arrius 2B2^{plus} or Pratt & Whitney Canada PW206B3 engines - both are FADEC controlled and provide efficient fuel burn characteristics. These powerful and reliable engines, combined with the improved dynamic lifting system components, provide outstanding performance and vital power reserves even in demanding High and Hot conditions.

The exceptional payload of the aircraft is the result of modern technology fabrication in conjunction with an extensive use of composite materials. The high degree of composite usage in the fuselage does not only result in a low empty weight but it also provides a high degree of safety and resistance against corrosive operating environments.

The ACH135 high rotor clearance and Fenestron facilitate safe ground operations for passengers and crews on prepared and unprepared surfaces.

The benchmark in reliability

The extensive fleet experience and high level of product maturity has enabled the ACH135's maintenance scheme to be "trimmed to perfection" delivering high intervals for the scheduled inspections, excellent maintainability, high TBO times, outstanding reliability and availability.

Style and comfort

Its cabin is elegant and modern with the comfort and the refinement you need for your helicopter travels. Its large sliding doors and rear clamshell doors provide a convenient boarding and disembarking while luggage can be loaded and retrieved safely and easily, even when the rotors are running.

Enjoy the view - ACH135's large windows offer exceptional visibility for passengers while relaxing in their comfortable seats.

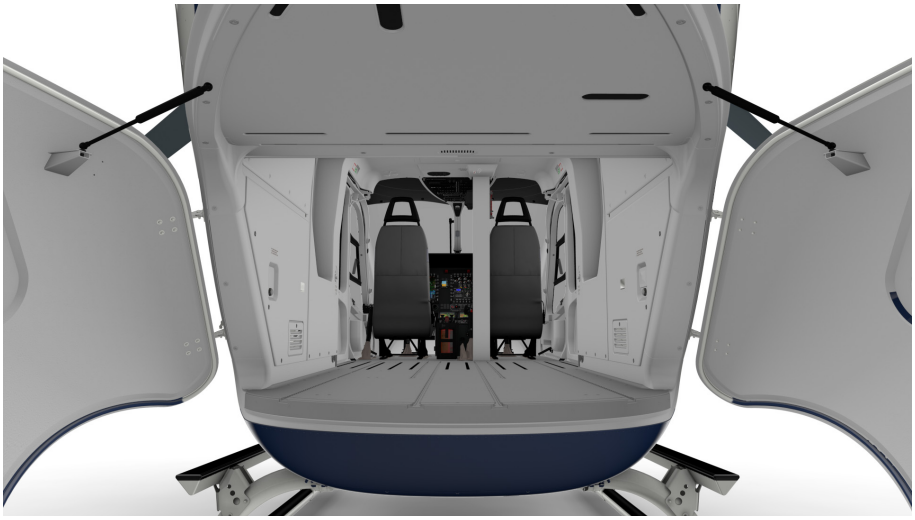


Figure 1.2: View from rear into the empty cabin

Advanced glass cockpit - flight and mission management

The ACH135 offers a glass cockpit solution with a highly efficient Human Machine Interface (HMI) designed to reduce the pilot workload and increase the flight safety. The avionics system, Helionix, is the latest generation of Airbus avionics, designed to provide enhanced safety and mission capability along with simplified maintainability. Helionix benefits from the long experience accumulated by Airbus in the development of innovative avionics.

The Helionix Flight Display Subsystem (FDS) is composed of Smart Multifunction Displays (MFD) providing state-of-the-art quality and precision imaging of flight parameters, as well as mission equipment from a moving map functionality to external cameras.

The pilot display offers all the flight, navigation and vehicle relevant data while the remaining displays are configurable for flight, vehicle or mission data. All Active Matrix Liquid Crystal Displays (AMLCD) feature perfect readability from any angle and in any light condition.

With the Helionix suite, the flight crew will experience:

- Enhanced pilot assistance thanks to the most advanced 4-axis digital AFCS with innovative upper modes expanding the aircraft capabilities in particular in low visibility conditions and over water, for both day and night missions
- Enhanced situation awareness with integrated Helicopter Terrain Awareness and Warning System (H-TWAS), Synthetic Vision System (SVS) and moving map as optional equipment
- Reduced pilot workload with innovative crew alerting concept such as the one hundred feet alert (required by EASA AIR-OPS) and Vehicle Management System (VMS)
- Unrivalled level of redundancy resulting from all functions embedded in each MFD, dual duplex aircraft management computers and 2 Attitude and Heading Reference Systems (AHRS) (in IFR configuration), plus an Integrated Electronic Stand-by Instrument (IESI).
- Full Usage Monitoring System (UMS) included in the basic Helionix package

The unique color coding, warning and information concept helps the pilots to collect all relevant parameters while suppressing presentation of non-relevant information. Additionally, the ACH135's unique First Limit Indicator (FLI) considerably simplifies engine and torque monitoring. The pilots workload is minimized thus allowing their attention to be concentrated on the mission. A NVG layout is optionally available.

In addition, the ACH135 digital avionics initialization procedures and self-test sequences are automatically performed in the background, minimizing the time to become airborne.

Figure 1.3: Typical instrument panel

Support & Services

Airbus primary missions begins providing the customer with the necessary support and services to carry out their operations efficiently, safely and cost-effectively.

Through the HCare service offer, Airbus Helicopters keeps businesses on track and rotorcraft in the skies. Spanning material management, helicopter maintenance, technical support, training and flight ops and supported by a wide range of connected services, HCare ensures that each flight is a success and performed with the highest level of safety.

Aviation safety

Airbus Helicopters' chief priority is to support flight safety for the thousands of passengers and crew around the world who are transported in its aircraft every day.

This commitment is reflected across all company activities involving the helicopter lifecycle: from the design to the maintenance in operation and associated training or on any partnerships. Airbus Helicopters' activities are focused on exceeding industry safety standards to support safe operation.

Airbus Helicopters' Aviation Safety policy is based on the following vision:

- Reaching excellence in Product Safety including survivability technologies and implementing Human Hazards Analysis to prevent Human Factor occurrences also in maintenance and production
- Being benchmark in Safety in operation by implementing the AH Safety Management System for delivery of safe aircrafts and services as well as delivering support tools to our operators

It also supports the EASA rotorcraft safety roadmap to reduce accidents and it includes the safety view of other industry bodies such as HeliOffshore, International Association of Oil and Gas Producers (IOGP) and International Helicopters Safety Foundation (IHSF).

In consequence, Airbus Helicopters vastly invests in Product Safety and Operational Aviation Safety Enhancements, beyond the authority's certification requirements.

About ACH - Airbus Corporate Helicopters

To differentiate and dedicate its approach to Private & Business Aviation, Airbus Helicopters introduces ACH - Airbus Corporate Helicopters - its exclusive brand offering end to end service-based ownership experience.

ACH provides an exclusive platform from which customers can benefit from best in class Corporate and VIP transport solutions, tailored completion and service. ACH ensures that only the highest quality materials and the best craftsmanship are on offer to customers.

ACH range now features the ACH prefix: ACH125®, ACH130®, ACH135®, ACH145®, ACH160® and ACH175®.

Please visit our dedicated website for more details: www.airbuscorporatehelicopters.com

1.1 Baseline Aircraft Highlights and Main Improvements

Sustainable Aviation Fuel

Sustainable Aviation Fuel (SAF) is an important pillar of Airbus Helicopters' decarbonisation strategy. It provides immediate CO2 reduction with no negative impact on the performance of the helicopter.

All Airbus helicopters are certified to fly with up to a 50% blend of SAF mixed with kerosene, it is our company's ambition to have our helicopters capable to fly with 100% SAF by the end of the decade.

In 2021 Airbus Helicopters was the 1st helicopter manufacturer to launch a flight campaign aiming to assess the impact of unblended SAF on the helicopter systems in the context of a 100% SAF research and development. A first flight took place in Nov 2021 with 100% SAF in one of the H225 engines. This flight was followed by a flight with 100% SAF in both the H225 engines in June 2022.

SAF has the potential to cut CO2 emissions by an average of 80% compared with conventional fossil fuels. It can help to significantly reduce CO2 emissions because it can be produced from waste materials - which are, among others, residuals from the food industry, such as used cooking oil.

Airbus Helicopters is continually increasing SAF usage, which has now become a standard fuel for all the company's internal operations, including development test flights, training and deliveries in Marignane and Donauworth.

In order to drive the deployment of biofuels, Airbus Helicopters has also launched a SAF User Group dedicated to the rotary-wing community. If you are interested, please contact: **contact.ahsafusergroup.ah@airbus.com**

Figure 1.4: H135 powered with a SAF blend

Connected services

Thanks to advances in helicopter technology, more data is being collected from each flight and maintenance procedure than ever before. This data has enormous potential to change the way operators support and maintain their helicopter fleet.

Airbus Helicopters offers a range of connected services solutions that help customers collect and make sense of their data. Benefits range from a better understanding of day-to-day operations, to predicting what unplanned maintenance issues might happen months from now. When data drives decision making, the result is more time flying, in the safest conditions, and cost-effectively.

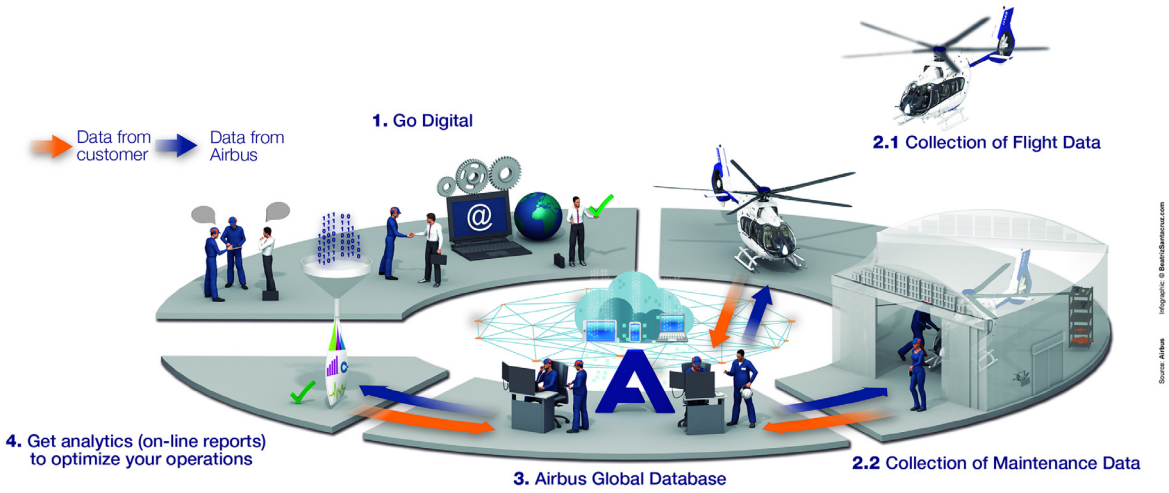


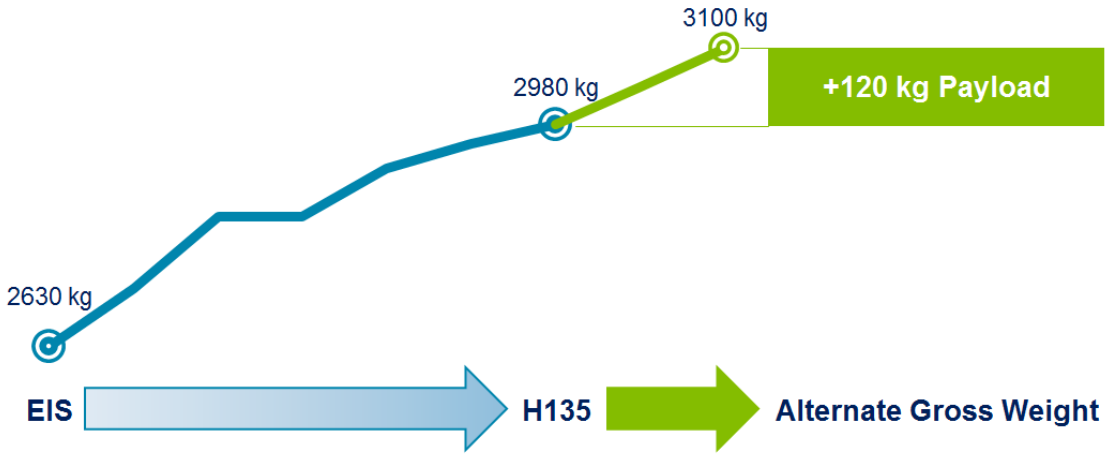
Figure 1.5: The ecosystem of connected services

1.2 Optional Equipment Highlights and Main Improvements

Alternate gross weight

The next step in the evolution of ACH135 is accomplished.

The gross mass of the helicopter can now be increased up to 3,100 kg (6,834 lb), with an additional 120 kg (265 lb) payload at disposal.



The optional Alternate gross weight allows for operations to be performed above 2,980 kg, including:

- Operations under VFR and IFR
- Cat. A procedures
- Flights with night vision goggles
- Cargo hook operations
- Flights with open or removed doors

Limitations are listed in the applicable Flight Manual appendix.

Once the helicopter gross weight has dropped below 2,980 kg (6,570 lb) the basic Flight Manual with its limitations is applicable.

Continuous Maintenance Program (CMP)

As an alternative to the standard maintenance program, Airbus proposes on ACH135 the Continuous Maintenance Program (CMP).

The CMP allows for continued flight operation without interruptions for inspection with longer downtimes.

The program consists of individual work packages to be performed each within a defined time frame. A specific tolerance is effective for all work packages, which refer to the start and end time of the individual work packages.

Cat. A Procedures

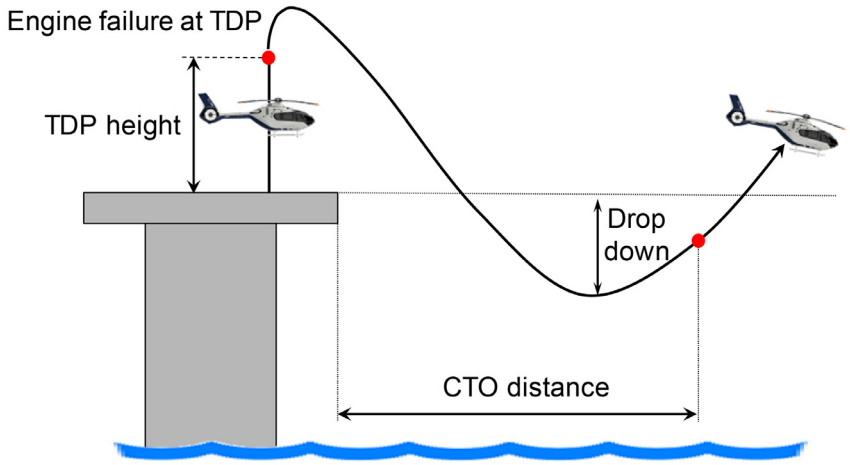
Crews and passengers of the ACH135 can rely on its performance, to cope with the most demanding conditions, also in case of emergency.

When operated in Category A, the ACH135 grants the safe prosecution of the flight, or the safe stop on the takeoff or landing area, also in case of one engine failure.

New procedures extend now the perimeter of operations that can be performed in Category A:

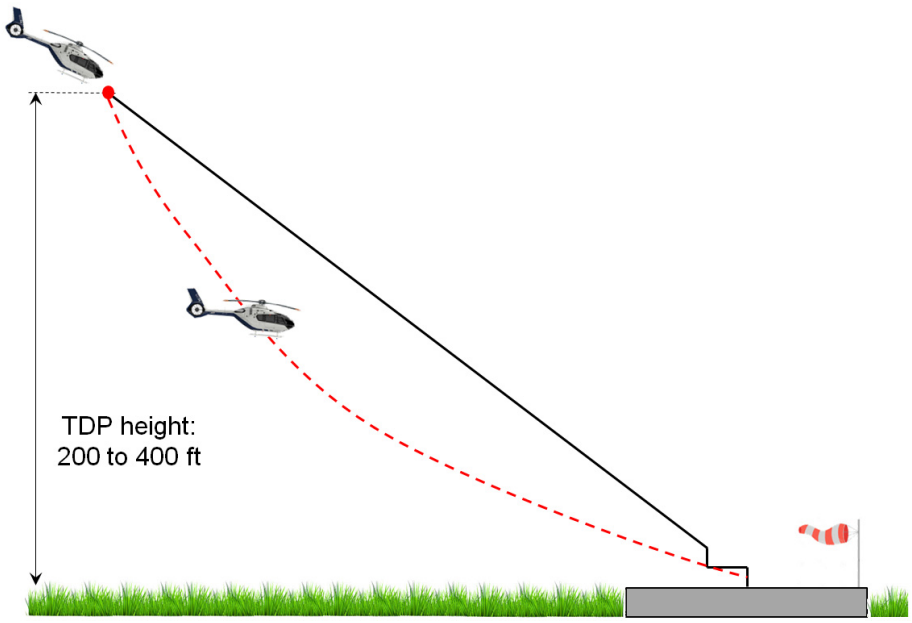
VTOL (4) - ELEVATED HELIPAD WITH DROP-DOWN

This new procedure provides optimized limits applicable to elevated helidecks with the possibility for the helicopter to temporarily and safely drop-down below the helideck altitude in case of emergency



VTOL (1) - EXTENDED REARWARD TAKEOFF AND LANDING

This new procedure allows for rearward takeoff and landing with decision points (TDP and LDP) that can be selected up to +400 ft above heliport altitude to ensure a safe clearance from obstacles.



Single pilot IFR cockpit

The flexibility of the ACH135 is underlined by the different avionic solutions available. The instrument panel can be freely configured for single or single/dual pilot operations. All options are offered with IFR certification:

- Three flight displays can be installed in the extended instrument panel, providing the highest mission capability for single or dual pilot operations.
- The Extended instrument panel in combination with two displays provides plenty of space for the customization with STC equipment.
- The installation of two displays on the standard instrument panel offers the lightest possible solution, combined with extraordinary external field of view.

Figure 1.6: Example of extended instrument panel with three (LH) and with two (RH) Multifunctional displays

Figure 1.7: Example of standard single pilot instrument panel with two MFD

ADS-B in

The ACH135 can be now equipped with an "ADS-B in" receiver, fully integrated in the Helionix avionics suite, significantly improving situational awareness and therefore safety.

ADS-B traffic information transmitted by aircraft (air-to-air) or by ground TIS-B (Traffic Information Services-Broadcast) stations is received by the Lynx NGT-9000R+ installed on ACH135. The information is prioritized and aggregated with the indications coming from the traditional transponder interrogation (TCAS I function) and made available to the pilots.

If air traffic is on a conflicting path, the system generates a traffic advisory on pilots' MFD together with synthesized-voice audio outputs, assisting pilots in detecting and avoiding aircraft intersecting their flight path.

Lynx NGT-9000R+ is a compact and modern piece of equipment combining a wide range of functions (transponder, ADS-B out, TCAS I, ADS-B in) with reduced weight, even lower than previous transponder plus TAS solutions.

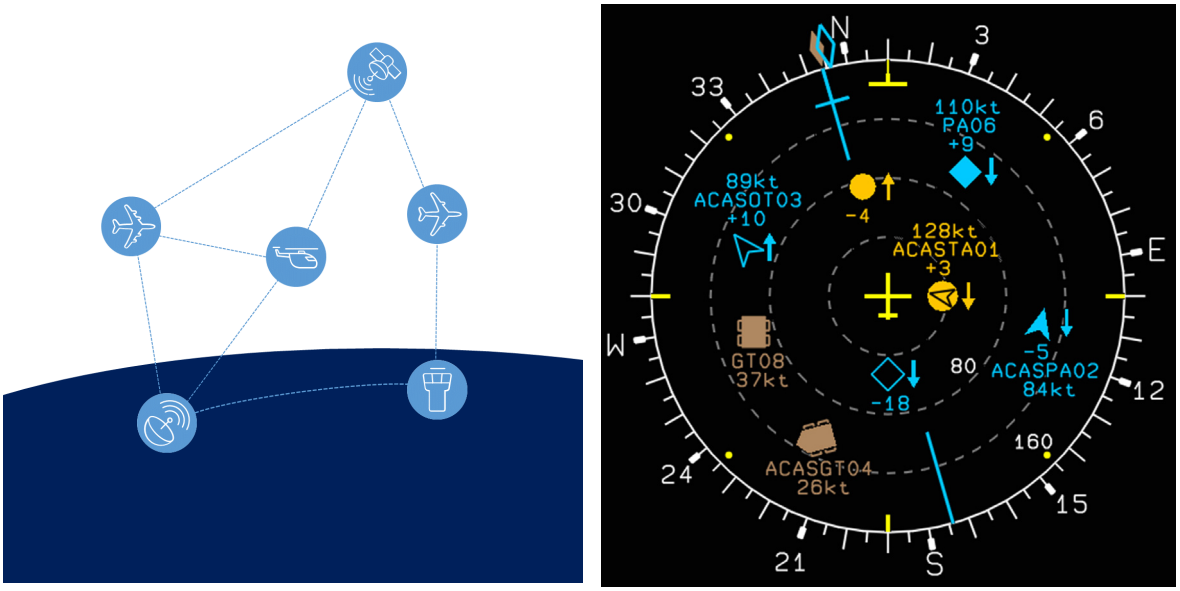


Figure 1.8: ADS-B infrastructure and example of traffic indication on pilot's MFD

6 Passenger Seats Configuration

ACH135 cabin allows for configurations with up to 6 passengers, in addition to pilot and copilot cockpit seats.

Figure 1.9: Example of 6 seat configuration, including additional equipment

The 6 passenger configuration is suited for a host of versatile needs.

The additional capacity allows possibilities to bring larger groups in the cabin and is especially relevant for families or even works as an efficient solution for the accompanying staff transportation.

Airbus helicopter sales representatives can advise on the specifics of this solution and support in the configuration phase.

ACH Line color moods

Elegant and stylish, ACH Line interior layouts deliver a unique atmosphere like no other.

A choice of six new color moods help perfect the experience: Oyster, Lagoon, Arctic, Earth, Canyon and Quartz.

Figure 1.10: Example of ACH Line interior in Canyon color mood, with dark grey interior panels

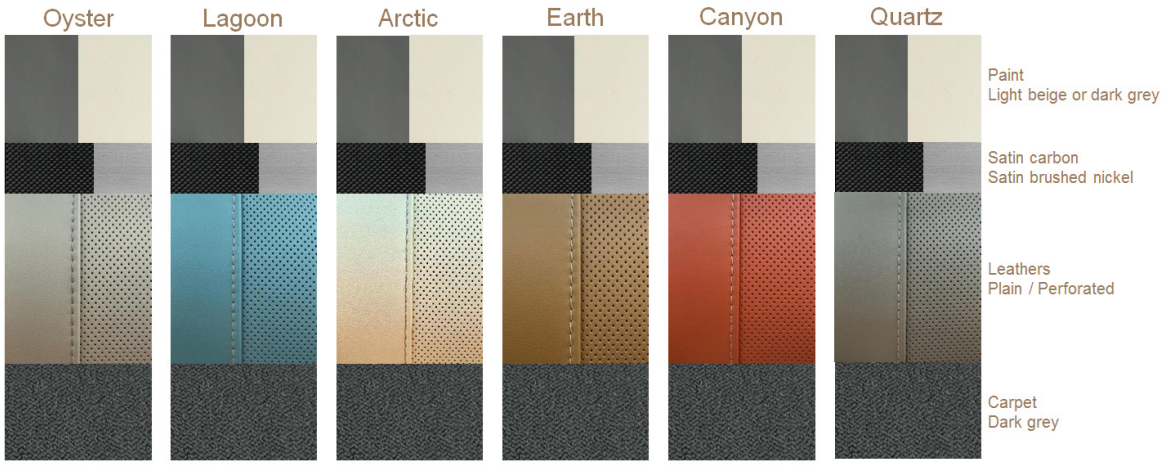


Figure 1.11: Overview of available color moods

Electrical power supply in cabin

Passengers travelling on board of the ACH135 can recharge their mobile devices, thanks to the electrical power supplied in the ACH Line rear cabinet.

The rear cabinet is installed between the 2 passenger seats in the rear row. The main storage compartment of the cabinet is accessible from the top and provides enough space for several portable devices.

Two USB power sockets of the type A or C can be configured, for installation on the inside of the cabinet's front panel in a convenient position.

Additional power sockets in cockpit, cabin and cargo compartment are available on request.

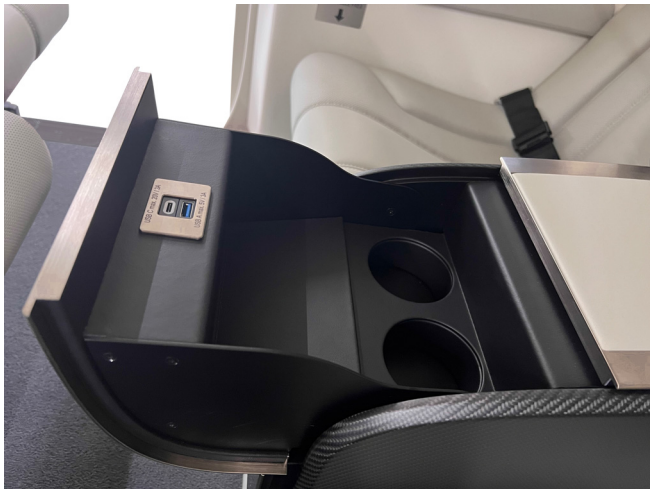


Figure 1.12: Example of ACH Line rear cabinet with USB type A and C sockets

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2 General Characteristics

2.1 Cockpit and Cabin Layouts

Seats & equipment as option
1 or 2 pilots + up to 6 passengers in energy absorbing seats

2.2 Weight

	kg	lb
• Empty weight, Baseline Aircraft Definition[a]	1,555	3,428
• Useful load, Baseline Aircraft Definition[ab]	1,425 / 1,545	3,142 / 3,406
• Pilot	85	187
• Payload and fuel[ab]	1,340 / 1,460	2,954 / 3,219
• Maximum Takeoff Weight (MTOW)	2,980	6,570
• Maximum Takeoff Weight (MTOW) with external load	2,980	6,570
• Maximum taxi weight	3,000	6,614
• Alternate gross weight[c]	3,100	6,834
• Maximum cargo-sling load (single hook)	1,200	2,646

a. -Tolerance ±1.5 %.
b. Optional equipment is required to achieve the higher value
c. Requires optional equipment

2.3 Power Ratings

Engine Ratings (Uninstalled)[1]

The ACH135 can be equipped with either two Pratt & Whitney Canada PW206B3 or two Safran Helicopter Engines ARRIUS 2B2^{plus} turboshaft engines. Values are per engine manufacturer specification.

Pratt & Whitney Canada PW206B3 turboshaft engines

All Engines Operative (AEO)	kW	shp
• Takeoff-Power (TOP)	528	708
• Maximum Continuous Power (MCP)	457	613

One Engine Inoperative (OEI)	kW	shp
• OEI 30 s	618	829
• OEI 2 min	588	788
• OEI MCP	532	713

1. Thermodynamic values per engine, in standard atmosphere, at sea level

Safran Helicopter Engines ARRIUS 2B2^{plus} turboshaft engines

All Engines Operative (AEO)	kW	shp
• Takeoff-Power (TOP)	492	660
• Maximum Continuous Power (MCP)	464	622

One Engine Inoperative (OEI)	kW	shp
• OEI 30 s	612	821
• OEI 2 min	595	798
• OEI MCP	542	727

Main Transmission Ratings

All Engines Operative (AEO)	kW	shp
• Takeoff Power (TOP)	2 x 320	2 x 429
• Maximum Continuous Power (MCP)	2 x 283	2 x 380

One Engine Inoperative (OEI)	kW	shp
• OEI 30 s	1 x 541	1 x 725
• OEI 2 min	1 x 529	1 x 709
• OEI MCP	1 x 379	1 x 508

2.4 Fuel Capacities

	Usable fuel			
	liters	US gal	kg	lb
• Standard fuel tanks	700.5	185.1	560.4	1,235.4
• Internal long range fuel tank (option)	212.7	56.2	170.2	375.2

Note: Tolerance of fuel figures: ±2 %; fuel density used is 0.8 kg/liter.

2.5 External Dimensions

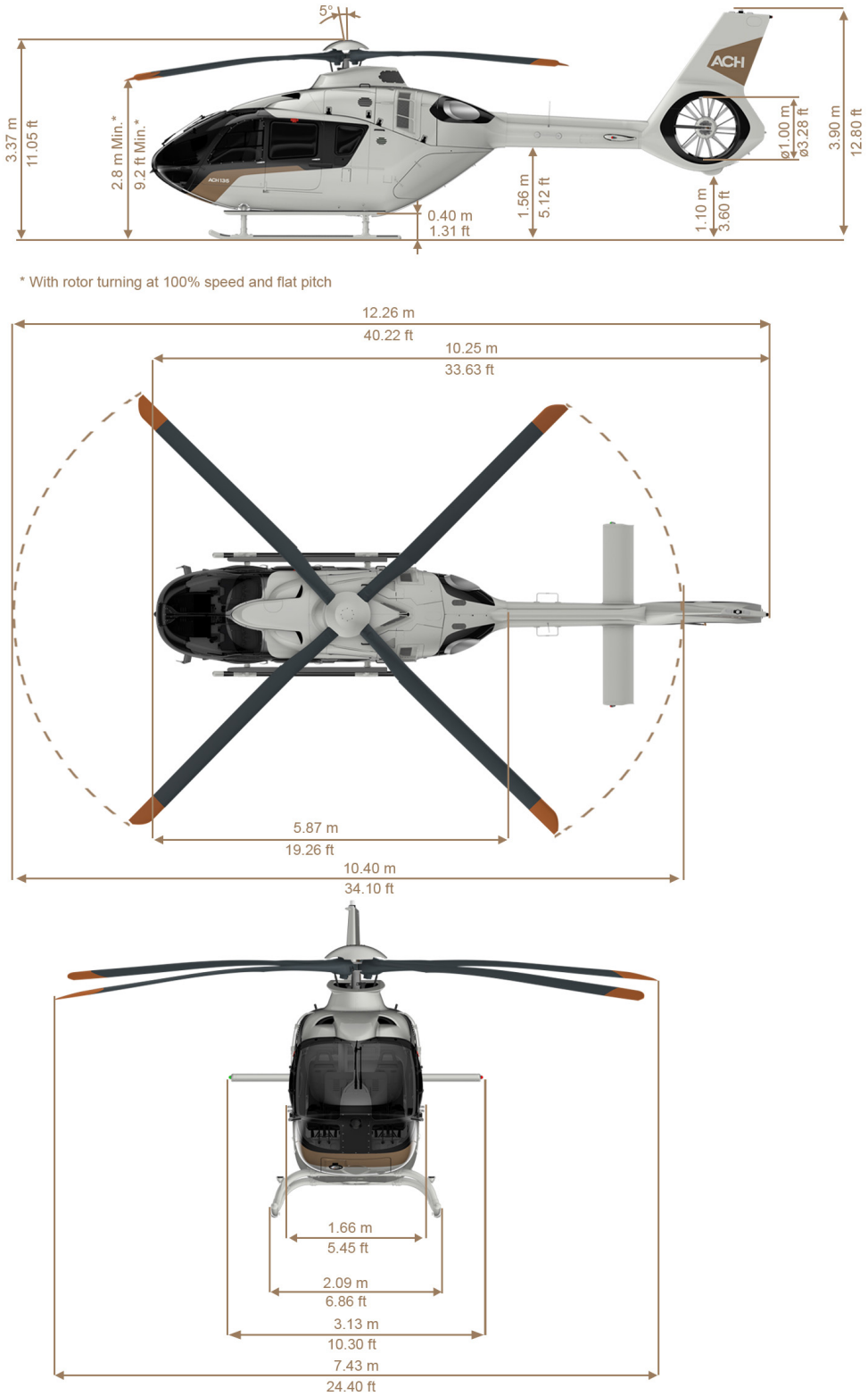

Figure 2.1: External dimensions

2.6 Internal Dimensions

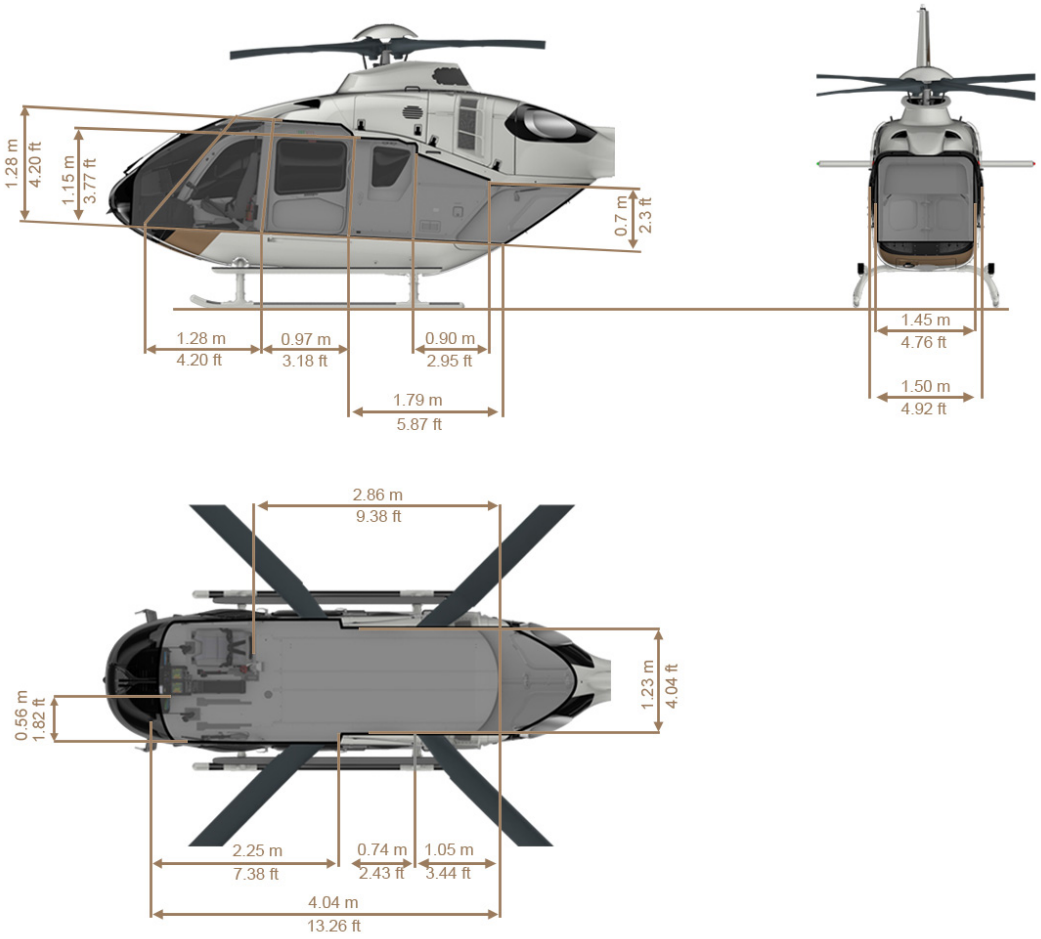

Figure 2.2: Internal dimensions

	Floor area		Volume	
Cabin & cargo compartment	4.33 m²	46.63 ft²	5.04 m³	177.89 ft³
Cockpit (pilot side)	1.00 m²	10.80 ft²	0.96 m³	34.14 ft³
Total (undivided)	5.33 m²	57.43 ft²	6.00 m³	212.03 ft³

2.7 External Sound Levels

Flight phase	Certified Sound Levels	ICAO Annex 16, Chapter 8.4.1 & FAR 36 H, Stage 2 limits at 2,980 kg	ICAO Annex 16, Chapter 8.4.2 & FAR 36 H, Stage 3 limits at 2,980 kg
	[EPNdB]	[EPNdB]	[EPNdB]
Takeoff [EPNL]	86.1	94.8	91.8
Overflight [EPNL]	82.7	93.8	89.8
Approach [EPNL]	90.3	95.8	94.8

2.8 Touch Down Forces

The touch down forces will be mainly transferred to a solid landing site via the four skid shoes on the landing gear.

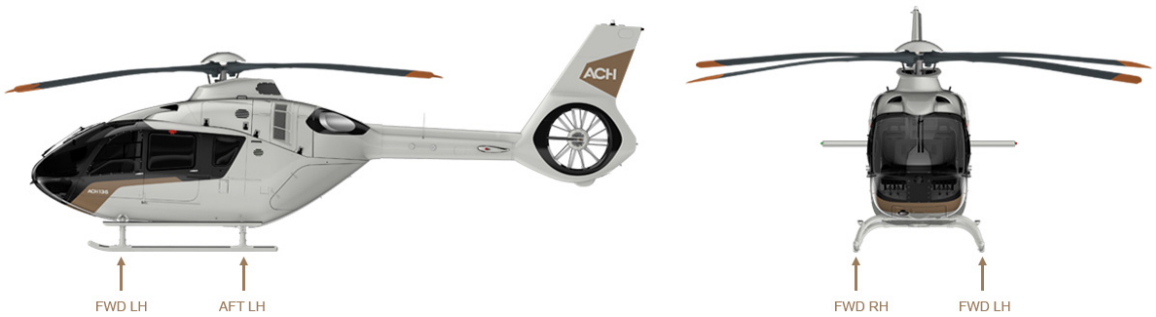

Figure 2.3: Touch down forces

Skid shoe position	FWD LH	FWD RH	AFT LH	AFT RH
Max. occurring force	17 kN	17 kN	24 kN	24 kN

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3 Baseline Aircraft Definition

H135 certified as variant EC135 P3H or EC135 T3H

GENERAL

- Energy absorbing fuselage
- Tail boom with fixed horizontal stabilizer
- Vertical fin with faired-in Fenestron
- Upper deck with fittings for main gearbox, engines, hydraulic and cooling system
- Cowlings for main transmission and engine
- Skid-type landing gear with skid protectors, capable of taking ground-handling wheels
- Long boarding steps, LH and RH
- Maintenance built-in steps and grips
- Exterior painting (single color)

COCKPIT, CABIN AND CARGO COMPARTMENT

- One-level cabin and cargo compartment floor with integrated rails
- Glazed canopy
- Two hinged cockpit doors with sliding window
- Map case in pilot's door
- Two wide passenger sliding doors
- Two rear hinged clam-shell doors
- Longitudinally adjustable energy absorbing pilot and copilot seats with head rest and 4-point safety belts with automatic locking system
- Cabin boarding grips LH and RH
- Interior paneling with integrated basic sound insulation
- Flight controls for pilot side; fixed provisions of flight controls for copilot side
- Covers for copilot collective lever, cyclic stick and pedals
- Collective control guard on copilot side[a]
- Engine controls with manual engine back-up system at pilot's collective pitch lever
- Single pilot instrument panel with glare shield and slant console
- Ram-air and electrical ventilating system for cockpit and cabin
- Helmet holder in the cockpit
- Headset holder in the cabin
- Portable fire extinguisher
- Stowage net for first aid kit at the LH rear clam-shell door
- Flash light (torch) for pilot side

a. Installed or delivered as loose part depending on final configuration

INSTRUMENTS

- Flight Display Subsystem (FDS) composed of 2 smart multifunction displays (6 x 8 inch) providing the following functions:
  - Flight and Navigation Display (FND) format (incl. PFD, FLI, Master List, NAV, RPM, mast moment & fuel indication)
  - Vehicle Management System (VMS) format (incl. engine, gearbox, fuel, electrical system, RPM & clock indication)
- Vehicle Management System (VMS) including:
  - 2 duplex Aircraft Management Computer (AMC)
- Reference sensors:
  - 1 Attitude and Heading Reference System
  - Air Data sensor pilot side (electrically heated pitot tube and static port)
  - 1 Magnetometer
- Standby instruments:
  - Integrated Electronic Standby Instrument (IESI)
  - Standby compass
- Usage Monitoring System (UMS)
- Flight Data Continuous Recorder (FDCR)
- "One hundred feet" alert
- Directional Gyro Free Steering Mode
- Warning unit:
  - Engine fire warning with fuel emergency shut-off
  - Warning lights
  - Fire extinguishing system warning
- Cockpit Control Panel (CCP) for FDS
- Data Transfer Device (DTD)
- Engine switch panel

POWER PLANT

- Two Pratt & Whitney Canada PW206B3 turbine engines or two Safran Helicopter Engines ARRIUS 2B2^{plus} turbine engines

  These two engines are equipped with:
  - Fire detectors
  - Full Authority Digital Engine Control (FADEC)
  - Chip detectors with quick-disconnect plugs
  - Overspeed protection system
  - Cycle indication on FDS
- Twin-engine OEI-training mode
- Oil cooling and lubricating system with thermostatic valve
- Crash resistant fuel system with a flexible bladder-type main tank and supply tank (split into two sections)
- Automatically controlled variable rotor speed system
- Fuel tank filler flap, lockable
- Drain system
- Fire walls

TRANSMISSION SYSTEM

- Flat-shaped main gearbox with two stages
- Chip detector system with quick-disconnect plug (main gearbox)
- Redundant oil cooling and lubrication system
- Main gearbox attachment with Anti-Resonance Isolation System (ARIS)
- Free wheel assemblies in the engine input drives
- Tail rotor drive shaft
- Tail rotor gearbox with splash lubrication and oil level sight gauge
- Chip detector system with quick-disconnect plug (tail rotor gearbox)

ROTOR AND FLIGHT CONTROLS

- Bearingless Main Rotor system (BMR) with improved dynamic characteristics, consisting of:
  - Rotor head / mast in one piece
  - Four fiber-reinforced composite main rotor blades with anti-erosion strips, control cuff, elastomeric lead-lag dampers and special blade tip painting
- Main rotor control system with dual hydraulic boost system
- Electrical trim system
- Basic provisions for an easy integration of a track and balance system
- Fenestron-type tail rotor with ten metal blades (asymmetric blade spacing) and stator
- Tail rotor gearbox cover
- Tail rotor control system with flexball cable and single hydraulic booster
- Digital 3-axis SAS (Stability Augmentation System)
- Mast moment system

ELECTRICAL INSTALLATION

- Two starter / generators (2x200 A, 28 VDC)
- Nickel-Cadmium battery, (24 VDC, 27 Ah)
- External power connector (STANAG 3302, LN9064, SAE AS 25018, SAE AS 35061)
- Power distribution system:
  - Two primary busbars
  - Two shedding busbars
  - Two essential busbars
  - Two high load busbars (80 A) - for optional equipment only
  - Two high power busbars (200 A)
  - Battery bus
- One utility receptacle in LH side of cargo compartment (28 VDC, 10 A)
- Lighting:
  - Anti-collision warning light (red flashing), LED
  - Fixed, nose-mounted landing light, LED
  - Three position lights (red, green, white), LED
  - Adjustable instrument lighting
  - One utility light in the cockpit
  - 5 spot-lights in the cabin
- One light in cargo compartment RH side
- Radio:
  - Two radio master switches

GROUND HANDLING KIT[a]

- Oil drain kit
- Fuel tank drain device
- Keys for cockpit doors, cabin doors, clam-shell doors and tank flap (one-key system)
- Battery key
- Lifting points
- Maintenance Ground Station (MGS) software
- Airbus Helicopters Data Loader (AHDL) software, basic version
- Flight Data Continuous Recorder (FDCR) converter
- Operational software for AMC and MFD
- Primary Configuration File (PCF)
- D-Box service subscription (incl. device and service) for one year[b]

a. Weight not included in the standard helicopter empty weight.
b. Device remains property of Airbus and is put at the Customer's disposal for its own use with services of hardware replacement in case of failure or obsolescence and software upgrade when applicable; it shall be returned by the Customer after this one-year period in case the service subscription is not renewed.

DOCUMENTATION (in English)

- One Flight Manual incl. supplements[ab] (on paper)
- One Pilots Checklist[c] (on paper)
- Master Minimum Equipment List (MMEL)[a] online via AirbusWorld® portal
- One Logbook (on paper, USB memory stick on demand)
- One Historical Record (on paper, USB memory stick on demand)
- Technical Documentation[a] incl. AMM, SDS, WDM, IPC, MSM, CECG, SRM online via AirbusWorld portal
- Service Bulletin Catalogue (SB) online via T.I.P.I.
- List of Applicable Publications (LOAP)[a] online via AirbusWorld portal
- One Avionics Manual[d] (for avionics installed by Airbus Helicopters) (on USB memory stick and online via AirbusWorld portal)
- Online Component Maintenance Manual (OCMM)[c] for vendor manuals online via AirbusWorld portal
- One Engine Documentation (online via engine manufacturer's portal), furnished by supplier, including:
  - Maintenance Manual
  - Illustrated Parts Catalogue

a. Revision service included as long as the aircraft is operational
b. One Flight Manual included in the standard helicopter empty weight
c. Revision service for 3 years
d. Customized documentation

4 Mission Configuration

Airbus offers the configurations specifically for ACH135 missions. These mission configurations should be regarded as a first proposal for customers to evaluate the suitability of the ACH135 for their needs. The below mentioned mission configurations comprise the Baseline Aircraft and a list of chosen mission equipment.

- Passenger transportation
- ACH Line, 5 passengers solution with one cabinet
- ACH Line, 4 passengers solution with one cabinet and one multifunctional box
- ACH Line, 4 passengers solution with two cabinet

Performance calculation

All data used for mission performance calculations in this document are for information purposes only and Airbus takes no responsibility for the correctness of this information, as far as the applicability to the receiving party's individual case is concerned. The present use of the named data shall not be construed as expressly or impliedly granting the receiving party any rights nor be deemed to constitute any kind of obligation or commitment of Airbus.

Further individual configurations

In chapter 5 the reader will find a General Available Equipment list including additional available equipments suitable for the ACH135. Customers may choose further items and add them to the mission configuration. Please note that there are various items which may be ordered for one helicopter, but their installation at the same time may not be possible completely or only partly. A detailed discussion is highly recommended in order to adapt the ACH135 configurations to the customer needs and to avoid misunderstandings or incompatible configurations. Any modification and/or complement of the proposed mission configuration must be done with the assistance of an Airbus helicopter sales representative.

ACH Line

Effortless beauty, maximum performance

ACH Line exudes simplicity. Fluid lines give it a dynamic and contemporary profile: a powerful look emphasized by impressive space and unmatchable comfort which combines perfectly with the aircraft design and technology.

This is a class leading configuration combining style & performance for the most demanding corporate and private missions.

ACH Line package offers a functional and refined cabin to enhance passenger cabin experience while providing the best operational performance.

A world of possibilities

ACH Line is available in 6 color schemes but can also be customized on request through our "bespoke service".

4.1 Passenger Transportation

4.1.1 Mission Parameters

• Flight Rules	Single / Dual Pilot IFR Night
• Cat. A	Yes
• Instrumentation	Glass Cockpit
• NVG friendly	Yes

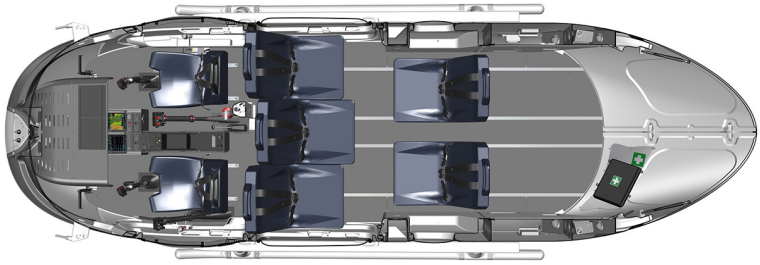


Figure 4.1: Passenger transportation

4.1.2 Mission Configuration

Baseline Aircraft

Qty	Document Reference	Commercial Reference	Description	kg	lb
Baseline Aircraft					
1	00-10048-A	**E0000-001-00**	H135 Baseline Aircraft 135 T3H/P3H 23.100.01 E	1,555.0	3,428.2
1	00-10048-A	**E0000-003-01**	Safran Helicopter Engines ARRIUS 2B2^{plus} turbine engines (2 engines)	0.0	0.0
1	00-10048-A	**E0000-003-02**	Pratt & Whitney Canada PW206B3 turbine engines (2 engines)	0.0	0.0
			Subtotal Weight[a]:	**1,555.0**	**3,428.2**

a. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

Mission Package

Qty	Document Reference	Commercial Reference	Description	kg	lb
Mandatory Equipment					
General Equipment					
1	05-03018-B	**E2561-000-00**	First aid kit[a]	1.1	2.4
1	05-22030-B	**E2621-000-00**	Engine fire extinguishing system	4.0	8.8
1	05-22031-A	**E7924-000-00**	Fuzz burners for engines	1.0	2.2
1	05-22032-C	**E7111-000-00**	Engine cowling heat protection	1.4	3.1
1	05-23009-B	**E7165-000-00**	Engine compressor wash kit	2.3	5.1
1	05-30004-C	**E3310-001-00**	Flashlight for copilot side	0.3	0.7
1	05-32014-A	**E3042-000-00**	Windshield wiper system	5.2	11.5
1	05-33007-B	**E3113-000-00**	Center console	1.4	3.1
1	05-34012-B	**E2570-000-00**	Avionics compartment	4.6	10.1

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	05-37030-B	**E6700-000-20**	Copilot flight controls, detachable parts	4.2	9.3
1	05-38025-C	**E3111-000-00**	Instrument panel extension on copilot side	2.3	5.1
1	05-39021-A	**E2513-001-00**	Map case in copilot door	0.4	0.9
1	05-39022-A	**E2514-000-00**	Map cases on instrument panel glare shield	0.6	1.3
1	05-41013-B	**E2142-100-00**	Bleed air heating system	6.4	14.1
1	05-61026-A	**E2433-100-00**	Battery (40 Ah, 24 VDC) ULM (Saft) instead of standard battery	8.3	18.3
1	05-67055-C	**E2461-002-01**	Power sockets (USB 1x type A, 1x type C), pilot	0.2	0.4
1	05-71003-B	**E6350-000-00**	Rotor brake system	5.9	13.0
Specific Mission Equipment					
1	06-45082-F	**E3343-200-10**	Search & landing light, LED, fixed provisions	0.9	2.0
1	06-45082-F	**E3343-200-20**	Search & landing light, LED, detachable parts	3.7	8.2
1	06-67081-A	**E2562-000-00**	Emergency Locator Transmitter (ELT)	1.7	3.7
1	06-71010-B	**E1150-200-00**	Standard cockpit, cabin and cargo compartment - NVG	0.0	0.0
1	06-71011-B	**E2521-500-10**	Separation curtain for cockpit / cabin, fixed provisions	0.6	1.3
Interior Layout					
1	07-15035-C	**E2512-102-00**	Height adjustable pilot seat instead of standard pilot seat	1.3	2.9
1	07-15035-C	**E2512-101-00**	Height adjustable copilot seat instead of standard copilot seat	1.3	2.9
Avionics					
1	**08-00462-B**	**E2300-620-01**	**Avionics Package SP/DP IFR GTN 750Xi / Lynx / Canyon[b]**		
1	08-16164-C	**E2341-000-00**	Digital Audio Control System (DACS), incl. ACP53 (Canyon), pilot + copilot	5.8	12.8
1	08-22085-B	**E3451-500-00**	Transponder Lynx NGT9000R+ (ACSS)[c]	5.1	11.2
1	08-25519-A	**E3455-000-00**	Distance Measuring Equipment (DME) DME-4000 (Rockwell Collins)	2.7	6.0
1	08-26063-A	**E3431-000-00**	Marker beacon receiver MKR3300-1 (Becker)	1.2	2.6
1	08-43083-B	**E3463-001-01**	GPS/NAV/COM GTN 750Xi (Garmin), copilot[d]	7.5	16.5
1	08-43083-B	**E3463-002-01**	GPS/NAV/COM GTN 750Xi (Garmin), pilot[d]	7.9	17.4
1	08-65054-B	**E3161-001-00**	Flight Display Subsystem (FDS), copilot	8.4	18.5
1	08-99005-C	**E0000-151-00**	Avionics Package SP/DP IFR GTN Series interconnection / wiring	20.6	45.4
1	08-16166-A	**E2340-000-00**	Headset electrical power supply (28 VDC), fixed provisions[e]	0.5	1.1
1	08-21036-A	**E3441-000-00**	Radar altimeter KRA 405B (Honeywell)	3.3	7.3
1	08-35068-B	**E3446-000-00**	Helicopter Terrain Awareness and Warning System (H-TAWS) - Helionix[f]	0.1	0.2
1	08-35069-C	**E3446-100-00**	Synthetic Vision System (SVS) - Helionix[f]	0.0	0.0
1	08-53010-B	**E2213-000-00**	Additional Attitude and Heading Reference System (AHRS) & magnetometer	5.5	12.1
1	08-54004-B	**E3411-000-00**	Copilot pitot static system	2.9	6.4
1	08-65068-G	**E3315-502-00**	Universal tablet holder, pilot	1.0	2.2
1	08-65073-A	**E3161-100-00**	Helionix data connector	0.6	1.3
1	08-72007-A	**E2212-100-00**	4-axis Automatic Flight Control System (AFCS)	17.0	37.5
1	08-82002-B	**E3139-000-01**	Lightweight Aircraft Recording System (LARS)	0.6	1.3

Qty	Document Reference	Commercial Reference	Description	kg	lb
Reference Equipment					
General Equipment					
1	05-02084-B	**E1111-100-00**	Enhanced exterior painting instead of standard painting	2.0	4.4
1	05-31146-C	**E2511-000-00**	Tinted sun shades for cockpit windshield roof section	1.8	4.0
1	05-31149-C	**E5611-300-00**	Tinted front windshields	0.0	0.0
1	05-31149-C	**E5632-300-00**	Tinted windows in cockpit doors	0.0	0.0
1	05-31149-C	**E5632-305-00**	Tinted windows in cabin incl. sliding windows in sliding doors	1.2	2.6
1	05-42051-B	**E2111-000-00**	Air Conditioning System (ACS)	52.1	114.9
1	05-67055-C	**E2461-300-00**	Power sockets (USB 1x type A, 1x type C on each side), LH & RH cabin window niche	1.0	2.2
1	05-85018-A	**E2841-000-00**	Fuel management system (fuel flow meters)	1.0	2.2
Specific Mission Equipment					
1	06-66025-B	**E3342-400-00**	Boarding step illuminations	0.3	0.7
Interior Layout					
1	07-27035-E	**E2522-307-01**	Passenger seating, 1 seat with 4-point single latch restraint system (rear row, facing in flight direction, LH)	12.0	26.5
1	07-27035-E	**E2522-308-01**	Passenger seating, 1 seat with 4-point single latch restraint system (rear row, facing in flight direction, RH)	12.0	26.5
1	07-27035-E	**E2522-006-01**	Passenger seating, 3 seats with 4-point single latch restraint system (front row, facing against flight direction)	38.8	85.5
1	07-90036-B	**E2524-005-00**	Retractable coat hooks in rear cabin (2 hooks)	0.1	0.2
Avionics					
7	08-18079-C	**E2342-100-00**	Headset adapter cable, without IC/TX switch, Glenair/LEMO ANR, short	0.0	0.0
7	08-18080-B	**E2315-300-04**	Headset A20 ANR LEMO (Bose), bluetooth, high impedance	2.1	4.6
1	08-43080-A	**E3464-200-00**	Wireless connectivity Flight Stream 510 (Garmin)	0.0	0.0
1	08-46070-B	**E3169-000-00**	Moving map - Helionix[f]	0.0	0.0
			Subtotal weight[g]:	**274.2**	**604.5**
			Total weight[g]:	**1,829.2**	**4,032.7**

a. Customization of first aid kit content necessary to comply with EASA AIR-OPS requirements. Medications may have to be removed for Export.
b. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
c. incl. ADS-B out, ADS-B in, TCAS I. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
d. SBAS RNP approach local service availability verification through your Airbus helicopter sales representative on request.
e. Required for Active Noise Reduction (ANR).
f. The database update service is provided under a dedicated service contract. Please contact your Airbus helicopter sales representative for further information.
g. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

4.1.3 Mission Performance

Weight breakdown (with payload and fuel)

		kg	lb
Weight basis for Payload Range Diagram	Equipped empty weight Passenger transportation, 5 passengers (incl. engine oil and unusable fuel)[a]	1,829	4,033
	1 pilot (1 x 85 kg)	85	187
Payload	5 passengers (5 x 85 kg)	425	937
Fuel	Reserve fuel: 20 min in 1,500 ft with 137 KTAS	71	157
	Contingency fuel: 5%	23	51
	Trip fuel	466	1,027
	Mission takeoff weight	2,899	6,392

a. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

Mission profile

- Takeoff Cat. A Clear Heliport at SL
- Climb flight AEO MCP from SL to 5,000 ft with V_Y, mean 67 KTAS
- Level flight in 5,000 ft with V_{BR}, mean 138 KTAS
- Descent from 5,000 ft to SL with R/D of 1,000 fpm, mean 83 KTAS
- Landing Cat. A Clear Heliport at SL

Payload range diagram

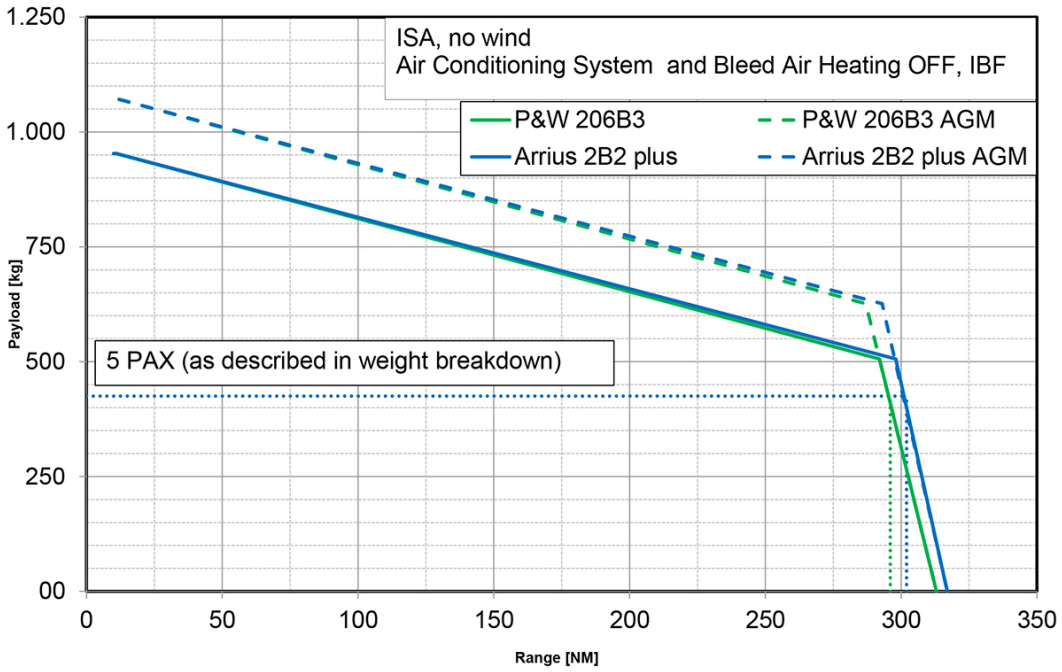


Figure 4.2: Passenger transportation - payload range diagram

Relevant flight data

	PW206B3 engines	Arrius 2B2plus engines
Calculated maximum range (without payload, with trip fuel)	313 NM (580 km)	317 NM (587 km)
Corresponding flight time	2 h 25 min	2 h 27 min

4.2 ACH Line, 5 Passengers Solution with one Cabinet

Figure 4.3: Example of ACH Line, 5 passenger solution with one cabinet

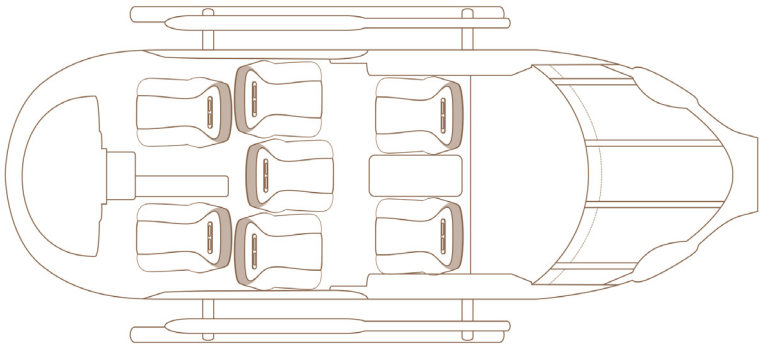


Figure 4.4: ACH Line, 5 passengers solution including one cabinet

4.2.1 Mission Parameters

• Flight Rules	Single / Dual Pilot IFR Night
• Cat. A	Yes
• Instrumentation	Glass Cockpit
• NVG friendly	No

4.2.2 Mission Configuration

Baseline Aircraft

Qty	Document Reference	Commercial Reference	Description	kg	lb
Baseline Aircraft					
1	00-10048-A	**E0000-001-00**	H135 Baseline Aircraft 135 T3H/P3H 23.100.01 E	1,555.0	3,428.2
1	00-10048-A	**E0000-003-01**	Safran Helicopter Engines ARRIUS 2B2^{plus} turbine engines (2 engines)	0.0	0.0
1	00-10048-A	**E0000-003-02**	Pratt & Whitney Canada PW206B3 turbine engines (2 engines)	0.0	0.0
			Subtotal weight[a]:	**1,555.0**	**3,428.2**

a. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

Mission Package

Qty	Document Reference	Commercial Reference	Description	kg	lb
Mandatory Equipment					
General Equipment					
1	05-03018-B	**E2561-000-00**	First aid kit[a]	1.1	2.4
1	05-22030-B	**E2621-000-00**	Engine fire extinguishing system	4.0	8.8
1	05-22031-A	**E7924-000-00**	Fuzz burners for engines	1.0	2.2
1	05-22032-C	**E7111-000-00**	Engine cowling heat protection	1.4	3.1
1	05-23009-B	**E7165-000-00**	Engine compressor wash kit	2.3	5.1
1	05-30004-C	**E3310-001-00**	Flashlight for copilot side	0.3	0.7
1	05-32014-A	**E3042-000-00**	Windshield wiper system	5.2	11.5
1	05-33007-B	**E3113-000-00**	Center console	1.4	3.1
1	05-34012-B	**E2570-000-00**	Avionics compartment	4.6	10.1
1	05-37030-B	**E6700-000-20**	Copilot flight controls, detachable parts	4.2	9.3
1	05-38025-C	**E3111-000-00**	Instrument panel extension on copilot side	2.3	5.1
1	05-39021-A	**E2513-001-00**	Map case in copilot door	0.4	0.9
1	05-39022-A	**E2514-000-00**	Map cases on instrument panel glare shield	0.6	1.3
1	05-41013-B	**E2142-100-00**	Bleed air heating system	6.4	14.1
1	05-61026-A	**E2433-100-00**	Battery (40 Ah, 24 VDC) ULM (Saft) instead of standard battery	8.3	18.3
1	05-67055-C	**E2461-002-01**	Power sockets (USB 1x type A, 1x type C), pilot	0.2	0.4
1	05-71003-B	**E6350-000-00**	Rotor brake system	5.9	13.0
Specific Mission Equipment					
1	06-45082-F	**E3343-200-10**	Search & landing light, LED, fixed provisions	0.9	2.0
1	06-45082-F	**E3343-200-20**	Search & landing light, LED, detachable parts	3.7	8.2
1	06-67081-A	**E2562-000-00**	Emergency Locator Transmitter (ELT)	1.7	3.7

Qty	Document Reference	Commercial Reference	Description	kg	lb
Avionics					
1	**08-00462-B**	**E2300-620-01**	**Avionics Package SP/DP IFR GTN 750Xi / Lynx / Canyon[b]**		
1	08-16164-C	**E2341-000-00**	Digital Audio Control System (DACS), incl. ACP53 (Canyon), pilot + copilot	5.8	12.8
1	08-22085-B	**E3451-500-00**	Transponder Lynx NGT9000R+ (ACSS)[c]	5.1	11.2
1	08-25519-A	**E3455-000-00**	Distance Measuring Equipment (DME) DME-4000 (Rockwell Collins)	2.7	6.0
1	08-26063-A	**E3431-000-00**	Marker beacon receiver MKR3300-1 (Becker)	1.2	2.6
1	08-43083-B	**E3463-001-01**	GPS/NAV/COM GTN 750Xi (Garmin), copilot[d]	7.5	16.5
1	08-43083-B	**E3463-002-01**	GPS/NAV/COM GTN 750Xi (Garmin), pilot[d]	7.9	17.4
1	08-65054-B	**E3161-001-00**	Flight Display Subsystem (FDS), copilot	8.4	18.5
1	08-99005-C	**E0000-151-00**	Avionics Package SP/DP IFR GTN Series interconnection / wiring	20.6	45.4
1	08-16166-A	**E2340-000-00**	Headset electrical power supply (28 VDC), fixed provisions[e]	0.5	1.1
1	08-21036-A	**E3441-000-00**	Radar altimeter KRA 405B (Honeywell)	3.3	7.3
1	08-35068-B	**E3446-000-00**	Helicopter Terrain Awareness and Warning System (H-TAWS) - Helionix[f]	0.1	0.2
1	08-35069-C	**E3446-100-00**	Synthetic Vision System (SVS) - Helionix[f]	0.0	0.0
1	08-53010-B	**E2213-000-00**	Additional Attitude and Heading Reference System (AHRS) & magnetometer	5.5	12.1
1	08-54004-B	**E3411-000-00**	Copilot pitot static system	2.9	6.4
1	08-65068-G	**E3315-502-00**	Universal tablet holder, pilot	1.0	2.2
1	08-65073-A	**E3161-100-00**	Helionix data connector	0.6	1.3
1	08-72007-A	**E2212-100-00**	4-axis Automatic Flight Control System (AFCS)	17.0	37.5
1	08-82002-B	**E3139-000-01**	Lightweight Aircraft Recording System (LARS)	0.6	1.3
Reference Equipment					
General Equipment					
1	05-02084-B	**E1111-300-00**	Complex exterior painting instead of standard painting	2.7	6.0
1	05-31146-C	**E2511-000-00**	Tinted sun shades for cockpit windshield roof section	1.8	4.0
1	05-31149-C	**E5611-300-00**	Tinted front windshields	0.0	0.0
1	05-31149-C	**E5632-300-00**	Tinted windows in cockpit doors	0.0	0.0
1	05-31149-C	**E5632-305-00**	Tinted windows in cabin incl. sliding windows in sliding doors	1.2	2.6
1	05-42051-B	**E2111-000-00**	Air Conditioning System (ACS)	52.1	114.9
1	05-85018-A	**E2841-000-00**	Fuel management system (fuel flow meters)	1.0	2.2
Specific Mission Equipment					
1	06-66025-B	**E3342-400-00**	Boarding step illuminations	0.3	0.7
Interior Layout					
1	07-30078-C	**E2581-100-00**	Enhanced sound proofing kit	30.0	66.1
1	07-30079-A	**E2521-100-00**	Separation wall for cabin / cargo compartment	4.4	9.7
1	07-50082-B	**E5231-000-00**	One-hand latching system for clam-shell doors	1.4	3.1
1	07-60049-B	**E2513-005-00**	Map cases in sliding doors	1.5	3.3
1	07-90036-B	**E2524-005-00**	Retractable coat hooks in rear cabin (2 hooks)	0.1	0.2

Qty	Document Reference	Commercial Reference	Description	kg	lb
Interior Layout - ACH Line, 5 passengers					
1	**07-80056-F**	**AAT-35200-206-2**	**ACH Line, 5 passengers, 1 cabinet, package (AAT - STC)[g]**		
1	07-81129-C	**AAT-35230-220-2**	ACH Line height adjustable pilot seat instead of standard pilot seat[h]	2.6	5.7
1	07-81129-C	**AAT-35230-221-2**	ACH Line height adjustable copilot seat instead of standard copilot seat[h]	2.6	5.7
1	07-81130-E	**AAT-35230-212-2**	ACH Line front passenger seats (2 seats)	31.0	68.3
1	07-81130-E	**AAT-35230-213-2**	ACH Line front middle passenger seat	14.4	31.7
1	07-81130-E	**AAT-35230-214-2**	ACH Line rear passenger seats (2 seats)	27.4	60.4
5	07-81130-E	**AAT-35230-210-2**	ACH Line, upholstery for lower seat structure of passenger seat	3.0	6.6
1	07-82022-C	**AAT-35220-201-2**	ACH Line, armrests in rear window niches	0.6	1.3
1	07-83036-B	**AAT-35220-208-2**	ACH Line entrance rails	1.2	2.6
1	07-83037-C	**AAT-35210-201-2**	ACH Line carpet for cockpit	5.2	11.5
1	07-83037-C	**AAT-35210-202-2**	ACH Line carpet for cabin	2.8	6.2
1	07-83037-C	**AAT-35210-203-2**	ACH Line carpet for cargo compartment	3.5	7.7
1	07-83039-C	**AAT-35220-210-2**	ACH Line leather cuffs for flight controls	0.1	0.2
1	07-85056-D	**AAT-35240-202-2**	ACH Line rear cabinet with USB power sockets	20.1	44.3
1	07-86035-B	**AAT-35260-200-2**	ACH Line Passenger Service Units (PSU)	1.4	3.1
1	07-86036-B	**AAT-35220-204-2**	ACH Line metal placards	0.2	0.4
2	07-81140-B	**E2512-000-90**	ACH Line pilot seat protection cover[i]	0.0	0.0
5	07-81140-B	**E2522-000-90**	ACH Line passenger seat protection cover[i]	0.0	0.0
Avionics					
7	08-18079-C	**E2342-100-00**	Headset adapter cable, without IC/TX switch, Glenair/LEMO ANR, short	0.0	0.0
7	08-18080-B	**E2315-300-04**	Headset A20 ANR LEMO (Bose), bluetooth, high impedance	2.1	4.6
1	08-43080-A	**E3464-200-00**	Wireless connectivity Flight Stream 510 (Garmin)	0.0	0.0
1	08-46070-B	**E3169-000-00**	Moving map - Helionix[f]	0.0	0.0
			Subtotal weight[j]:	**361.3**	**796.5**
			Total Weight[j]:	**1,916.3**	**4,224.7**

a. Customization of first aid kit content necessary to comply with EASA AIR-OPS requirements. Medications may have to be removed for Export.
b. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
c. incl. ADS-B out, ADS-B in, TCAS I. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
d. SBAS RNP approach local service availability verification through your Airbus helicopter sales representative on request.
e. Required for Active Noise Reduction (ANR).
f. The database update service is provided under a dedicated service contract. Please contact your Airbus helicopter sales representative for further information.
g. This STC is only EASA certified. Prices and leadtimes for national certifications are available on request.
h. Incl. standard safety belt buckles.
i. GSE.
j. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

4.2.3 ACH Line - Color Moods and Interior Paintings

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	07-80056-F	**AAT-35290-170-1**	ACH Line, Oyster color mood	0.0	0.0
1	07-80056-F	**AAT-35290-171-1**	ACH Line, Lagoon color mood	0.0	0.0
1	07-80056-F	**AAT-35290-172-1**	ACH Line, Artic color mood	0.0	0.0
1	07-80056-F	**AAT-35290-173-1**	ACH Line, Earth color mood	0.0	0.0
1	07-80056-F	**AAT-35290-174-1**	ACH Line, Canyon color mood	0.0	0.0
1	07-80056-F	**AAT-35290-175-1**	ACH Line, Quartz color mood	0.0	0.0
1	07-80056-F	**E1150-100-00**	ACH Line interior painting, light beige (RAL 1013), semi-gloss finish	0.0	0.0
1	07-80056-F	**E1150-110-00**	ACH Line interior painting, dark grey (RAL 7043), semi-gloss finish	0.0	0.0

4.2.4 Mission Performance

Weight breakdown (with payload and fuel)

		kg	lb
Weight basis for Payload Range Diagram	Equipped empty weight ACH Line, 5 passengers, 1 cabinet (incl. engine oil and unusable fuel)[a]	1,916	4,225
	1 pilot (1 x 85 kg)	85	187
Payload	5 passengers (5 x 85 kg)	425	937
Fuel	Reserve fuel: 20 min in 1,500 ft with 137 KTAS	73	161
	Contingency fuel: 5%	24	53
	Trip fuel	457	1,008
	Mission takeoff weight (MTOW)	2,980	6,570

a. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

Mission profile

- Takeoff Cat. A Clear Heliport at SL
- Climb flight AEO MCP from SL to 5,000 ft with V_Y, mean 67 KTAS
- Level flight in 5,000 ft with V_{BR}, mean 138 KTAS
- Descent from 5,000 ft to SL with R/D of 1,000 fpm, mean 83 KTAS
- Landing Cat. A Clear Heliport at SL

Payload range diagram

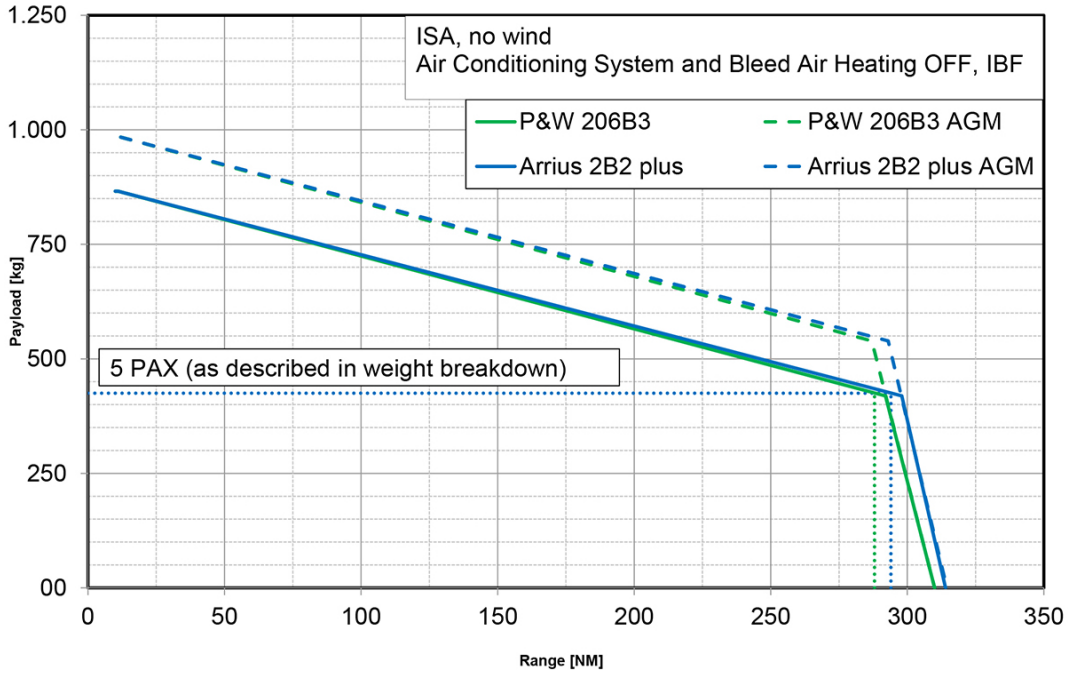


Figure 4.5: ACH Line, 5 passengers, 1 cabinet - payload range diagram

Relevant flight data

	PW206B3 engines	Arrius 2B2^{plus} engines
Calculated maximum range (without payload, with trip fuel)	310 NM (574 km)	314 NM (582 km)
Corresponding flight time	2 h 24 min	2 h 26 min

4.3 ACH Line, 4 Passengers Solution with one Cabinet and one Multifunctional Box

Figure 4.6: Example of ACH Line, 4 passenger solution with one cabinet and one multifunctional box

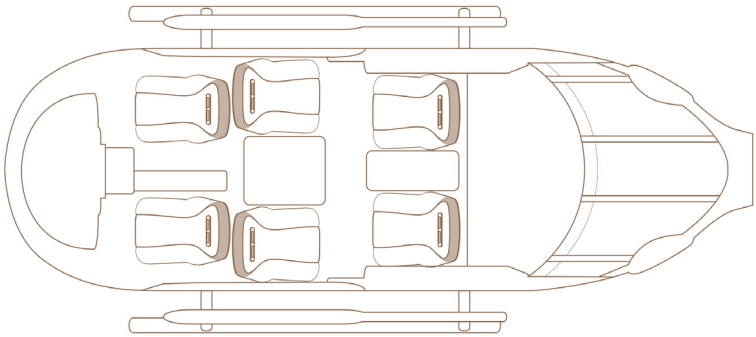


Figure 4.7: ACH Line, 4 passengers solution including one cabinet and one multifunctional box

4.3.1 Mission Parameters

• Flight Rules	Single / Dual Pilot IFR Night
• Cat. A	Yes
• Instrumentation	Glass Cockpit
• NVG friendly	No

4.3.2 Mission Configuration

Baseline Aircraft

Qty	Document Reference	Commercial Reference	Description	kg	lb
Baseline Aircraft					
1	00-10048-A	**E0000-001-00**	H135 Baseline Aircraft 135 T3H/P3H 23.100.01 E	1,555.0	3,428.2
1	00-10048-A	**E0000-003-01**	Safran Helicopter Engines ARRIUS 2B2^{plus} turbine engines (2 engines)	0.0	0.0
1	00-10048-A	**E0000-003-02**	Pratt & Whitney Canada PW206B3 turbine engines (2 engines)	0.0	0.0
			Subtotal weight[a]:	**1,555.0**	**3,428.2**

a. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

Mission Package

Qty	Document Reference	Commercial Reference	Description	kg	lb
Mandatory Equipment					
General Equipment					
1	05-03018-B	**E2561-000-00**	First aid kit[a]	1.1	2.4
1	05-22030-B	**E2621-000-00**	Engine fire extinguishing system	4.0	8.8
1	05-22031-A	**E7924-000-00**	Fuzz burners for engines	1.0	2.2
1	05-22032-C	**E7111-000-00**	Engine cowling heat protection	1.4	3.1
1	05-23009-B	**E7165-000-00**	Engine compressor wash kit	2.3	5.1
1	05-30004-C	**E3310-001-00**	Flashlight for copilot side	0.3	0.7
1	05-32014-A	**E3042-000-00**	Windshield wiper system	5.2	11.5
1	05-33007-B	**E3113-000-00**	Center console	1.4	3.1
1	05-34012-B	**E2570-000-00**	Avionics compartment	4.6	10.1
1	05-37030-B	**E6700-000-20**	Copilot flight controls, detachable parts	4.2	9.3
1	05-38025-C	**E3111-000-00**	Instrument panel extension on copilot side	2.3	5.1
1	05-39021-A	**E2513-001-00**	Map case in copilot door	0.4	0.9
1	05-39022-A	**E2514-000-00**	Map cases on instrument panel glare shield	0.6	1.3
1	05-41013-B	**E2142-100-00**	Bleed air heating system	6.4	14.1
1	05-61026-A	**E2433-100-00**	Battery (40 Ah, 24 VDC) ULM (Saft) instead of standard battery	8.3	18.3
1	05-67055-C	**E2461-002-01**	Power sockets (USB 1x type A, 1x type C), pilot	0.2	0.4
1	05-71003-B	**E6350-000-00**	Rotor brake system	5.9	13.0
Specific Mission Equipment					
1	06-45082-F	**E3343-200-10**	Search & landing light, LED, fixed provisions	0.9	2.0
1	06-45082-F	**E3343-200-20**	Search & landing light, LED, detachable parts	3.7	8.2
1	06-67081-A	**E2562-000-00**	Emergency Locator Transmitter (ELT)	1.7	3.7
Avionics					
1	**08-00462-B**	**E2300-620-01**	**Avionics Package SP/DP IFR GTN 750Xi / Lynx / Canyon[b]**		
1	08-16164-C	**E2341-000-00**	Digital Audio Control System (DACS), incl. ACP53 (Canyon), pilot + copilot	5.8	12.8
1	08-22085-A	**E3451-500-00**	Transponder Lynx NGT9000R+ (ACSS)[c]	5.1	11.2
1	08-25519-A	**E3455-000-00**	Distance Measuring Equipment (DME) DME-4000 (Rockwell Collins)	2.7	6.0
1	08-26063-A	**E3431-000-00**	Marker beacon receiver MKR3300-1 (Becker)	1.2	2.6

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	08-43083-B	**E3463-001-01**	GPS/NAV/COM GTN 750Xi (Garmin), copilot[d]	7.5	16.5
1	08-43083-B	**E3463-002-01**	GPS/NAV/COM GTN 750Xi (Garmin), pilot[d]	7.9	17.4
1	08-65054-B	**E3161-001-00**	Flight Display Subsystem (FDS), copilot	8.4	18.5
1	08-99005-C	**E0000-151-00**	Avionics Package SP/DP IFR GTN Series interconnection / wiring	20.6	45.4
1	08-16166-A	**E2340-000-00**	Headset electrical power supply (28 VDC), fixed provisions[e]	0.5	1.1
1	08-21036-A	**E3441-000-00**	Radar altimeter KRA 405B (Honeywell)	3.3	7.3
1	08-35068-B	**E3446-000-00**	Helicopter Terrain Awareness and Warning System (H-TAWS) - Helionix[f]	0.1	0.2
1	08-35069-C	**E3446-100-00**	Synthetic Vision System (SVS) - Helionix[f]	0.0	0.0
1	08-53010-B	**E2213-000-00**	Additional Attitude and Heading Reference System (AHRS) & magnetometer	5.5	12.1
1	08-54004-B	**E3411-000-00**	Copilot pitot static system	2.9	6.4
1	08-65068-G	**E3315-502-00**	Universal tablet holder, pilot	1.0	2.2
1	08-65073-A	**E3161-100-00**	Helionix data connector	0.6	1.3
1	08-72007-A	**E2212-100-00**	4-axis Automatic Flight Control System (AFCS)	17.0	37.5
1	08-82002-B	**E3139-000-01**	Lightweight Aircraft Recording System (LARS)	0.6	1.3
Reference Equipment					
General Equipment					
1	05-02084-B	**E1111-300-00**	Complex exterior painting instead of standard painting	2.7	6.0
1	05-31146-C	**E2511-000-00**	Tinted sun shades for cockpit windshield roof section	1.8	4.0
1	05-31149-C	**E5611-300-00**	Tinted front windshields	0.0	0.0
1	05-31149-C	**E5632-300-00**	Tinted windows in cockpit doors	0.0	0.0
1	05-31149-C	**E5632-305-00**	Tinted windows in cabin incl. sliding windows in sliding doors	1.2	2.6
1	05-42051-B	**E2111-000-00**	Air Conditioning System (ACS)	52.1	114.9
1	05-85018-A	**E2841-000-00**	Fuel management system (fuel flow meters)	1.0	2.2
Specific Mission Equipment					
1	06-66025-B	**E3342-400-00**	Boarding step illuminations	0.3	0.7
Interior Layout					
1	07-30078-C	**E2581-100-00**	Enhanced sound proofing kit	30.0	66.1
1	07-30079-A	**E2521-100-00**	Separation wall for cabin / cargo compartment	4.4	9.7
1	07-50082-B	**E5231-000-00**	One-hand latching system for clam-shell doors	1.4	3.1
1	07-60049-B	**E2513-005-00**	Map cases in sliding doors	1.5	3.3
1	07-90036-B	**E2524-005-00**	Retractable coat hooks in rear cabin (2 hooks)	0.1	0.2
Interior Layout - ACH Line, 4 passengers					
1	**07-80056-F**	**AAT-35200-226-2**	**ACH Line, 4 passengers, 1 cabinet, 1 multifunctional box, package (AAT - STC)[g]**		
1	07-81129-C	**AAT-35230-220-2**	ACH Line height adjustable pilot seat instead of standard pilot seat[h]	2.6	5.7
1	07-81129-C	**AAT-35230-221-2**	ACH Line height adjustable copilot seat instead of standard copilot seat[h]	2.6	5.7
1	07-81130-E	**AAT-35230-212-2**	ACH Line front passenger seats (2 seats)	31.0	68.3
1	07-81130-E	**AAT-35230-214-2**	ACH Line rear passenger seats (2 seats)	27.4	60.4
4	07-81130-E	**AAT-35230-210-2**	ACH Line, upholstery for lower seat structure of passenger seat	2.4	5.3
1	07-82022-C	**AAT-35220-201-2**	ACH Line, armrests in rear window niches	0.6	1.3
1	07-83036-B	**AAT-35220-208-2**	ACH Line entrance rails	1.2	2.6
1	07-83037-C	**AAT-35210-201-2**	ACH Line carpet for cockpit	5.2	11.5

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	07-83037-C	**AAT-35210-202-2**	ACH Line carpet for cabin	2.8	6.2
1	07-83037-C	**AAT-35210-203-2**	ACH Line carpet for cargo compartment	3.5	7.7
1	07-83039-C	**AAT-35220-210-2**	ACH Line leather cuffs for flight controls	0.1	0.2
1	07-85056-D	**AAT-35240-202-2**	ACH Line rear cabinet with USB power sockets	20.1	44.3
1	07-82023-B	**AAT-35240-203-2**	ACH Line multifunctional box	14.8	32.6
1	07-86035-B	**AAT-35260-200-2**	ACH Line Passenger Service Units (PSU)	1.4	3.1
1	07-86036-B	**AAT-35220-204-2**	ACH Line metal placards	0.2	0.4
2	07-81140-B	**E2512-000-90**	ACH Line pilot seat protection cover[i]	0.0	0.0
4	07-81140-B	**E2522-000-90**	ACH Line passenger seat protection cover[i]	0.0	0.0
Avionics					
6	08-18079-C	**E2342-100-00**	Headset adapter cable, without IC/TX switch, Glenair/LEMO ANR, short	0.0	0.0
6	08-18080-B	**E2315-300-04**	Headset A20 ANR LEMO (Bose), bluetooth, high impedance	1.8	4.0
1	08-43080-A	**E3464-200-00**	Wireless connectivity Flight Stream 510 (Garmin)	0.0	0.0
1	08-46070-B	**E3169-000-00**	Moving map - Helionix[f]	0.0	0.0
			Subtotal weight[j]:	**360.8**	**795.4**
			Total Weight[j]:	**1,915.8**	**4,223.6**

a. Customization of first aid kit content necessary to comply with EASA AIR-OPS requirements. Medications may have to be removed for Export.
b. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
c. incl. ADS-B out, ADS-B in, TCAS I. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
d. SBAS RNP approach local service availability verification through your Airbus helicopter sales representative on request.
e. Required for Active Noise Reduction (ANR).
f. The database update service is provided under a dedicated service contract. Please contact your Airbus helicopter sales representative for further information.
g. This STC is only EASA certified. Prices and leadtimes for national certifications are available on request.
h. Incl. standard safety belt buckles.
i. GSE.
j. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

4.3.3 ACH Line - Color Moods and Interior Paintings

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	07-80056-F	**AAT-35290-170-1**	ACH Line, Oyster color mood	0.0	0.0
1	07-80056-F	**AAT-35290-171-1**	ACH Line, Lagoon color mood	0.0	0.0
1	07-80056-F	**AAT-35290-172-1**	ACH Line, Artic color mood	0.0	0.0
1	07-80056-F	**AAT-35290-173-1**	ACH Line, Earth color mood	0.0	0.0
1	07-80056-F	**AAT-35290-174-1**	ACH Line, Canyon color mood	0.0	0.0
1	07-80056-F	**AAT-35290-175-1**	ACH Line, Quartz color mood	0.0	0.0
1	07-80056-F	**E1150-100-00**	ACH Line interior painting, light beige (RAL 1013), semi-gloss finish	0.0	0.0
1	07-80056-F	**E1150-110-00**	ACH Line interior painting, dark grey (RAL 7043), semi-gloss finish	0.0	0.0

4.3.4 Mission Performance

Weight breakdown (with payload and fuel)

		kg	lb
Weight basis for Payload Range Diagram	Equipped empty weight ACH Line, 4 passengers, 1 cabinet, 1 multifunctional box, (incl. engine oil and unusable fuel)[a]	1,916	4,224
	1 pilot (1 x 85 kg)	85	187
Payload	4 passengers (4 x 85 kg)	340	750
Fuel	Reserve fuel: 20 min in 1,500 ft with 136 KTAS	71	157
	Contingency fuel: 5%	23	51
	Trip fuel	466	1,027
	Mission takeoff weight	2,901	6,395

a. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

Mission profile

- Takeoff Cat. A Clear Heliport at SL
- Climb flight AEO MCP from SL to 5,000 ft with V_Y, mean 67 KTAS
- Level flight in 5,000 ft with V_{BR}, mean 136 KTAS
- Descent from 5,000 ft to SL with R/D of 1,000 fpm, mean 83 KTAS
- Landing Cat. A Clear Heliport at SL

Payload range diagram

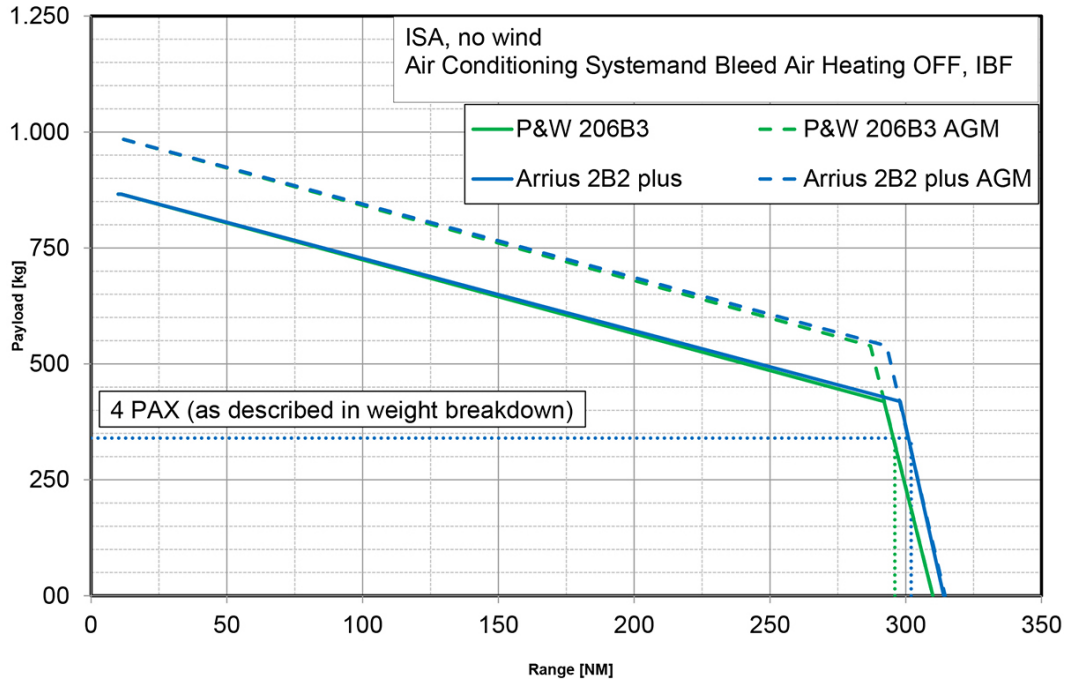


Figure 4.8: ACH Line, 4 passengers, 1 cabinet, 1 multifunctional box - payload range diagram

Relevant flight data

	PW206B3 engines	Arrius 2B2^{plus} engines
Calculated maximum range (without payload, with trip fuel)	310 NM (574 km)	314NM (582 km)
Corresponding flight time	2 h 24 min	2 h 26 min

4.4 ACH Line, 4 Passengers Solution with two Cabinets

Figure 4.9: Example of ACH line, 4 Passenger solution with two cabinets

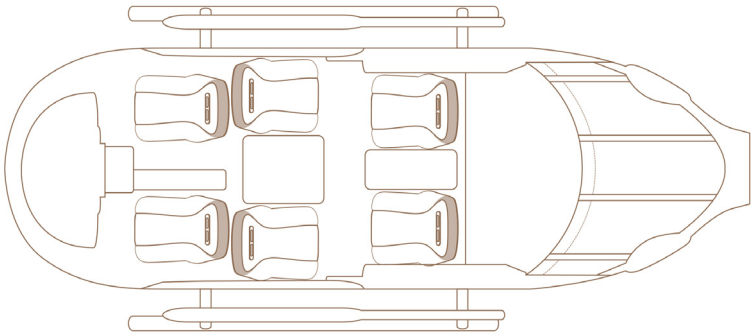


Figure 4.10: ACH Line, 4 passengers solution including two cabinets

4.4.1 Mission Parameters

• Flight Rules	Single / Dual Pilot IFR Night
• Cat. A	Yes
• Instrumentation	Glass Cockpit
• NVG friendly	No

4.4.2 Mission Configuration

Baseline Aircraft

Qty	Document Reference	Commercial Reference	Description	kg	lb
Baseline Aircraft					
1	00-10048-A	**E0000-001-00**	H135 Baseline Aircraft 135 T3H/P3H 23.100.01 E	1,555.0	3,428.2
1	00-10048-A	**E0000-003-01**	Safran Helicopter Engines ARRIUS 2B2^{plus} turbine engines (2 engines)	0.0	0.0
1	00-10048-A	**E0000-003-02**	Pratt & Whitney Canada PW206B3 turbine engines (2 engines)	0.0	0.0
			Subtotal weight[a]:	**1,555.0**	**3,428.2**

a. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

Mission Package

Qty	Document Reference	Commercial Reference	Description	kg	lb
Mandatory Equipment					
General Equipment					
1	05-03018-B	**E2561-000-00**	First aid kit[a]	1.1	2.4
1	05-22030-B	**E2621-000-00**	Engine fire extinguishing system	4.0	8.8
1	05-22031-A	**E7924-000-00**	Fuzz burners for engines	1.0	2.2
1	05-22032-C	**E7111-000-00**	Engine cowling heat protection	1.4	3.1
1	05-23009-B	**E7165-000-00**	Engine compressor wash kit	2.3	5.1
1	05-30004-C	**E3310-001-00**	Flashlight for copilot side	0.3	0.7
1	05-32014-A	**E3042-000-00**	Windshield wiper system	5.2	11.5
1	05-33007-B	**E3113-000-00**	Center console	1.4	3.1
1	05-34012-B	**E2570-000-00**	Avionics compartment	4.6	10.1
1	05-37030-B	**E6700-000-20**	Copilot flight controls, detachable parts	4.2	9.3
1	05-38025-C	**E3111-000-00**	Instrument panel extension on copilot side	2.3	5.1
1	05-39021-A	**E2513-001-00**	Map case in copilot door	0.4	0.9
1	05-39022-A	**E2514-000-00**	Map cases on instrument panel glare shield	0.6	1.3
1	05-41013-B	**E2142-100-00**	Bleed air heating system	6.4	14.1
1	05-61026-A	**E2433-100-00**	Battery (40 Ah, 24 VDC) ULM (Saft) instead of standard battery	8.3	18.3
1	05-67055-C	**E2461-002-01**	Power sockets (USB 1x type A, 1x type C), pilot	0.2	0.4
1	05-71003-B	**E6350-000-00**	Rotor brake system	5.9	13.0
Specific Mission Equipment					
1	06-45082-F	**E3343-200-10**	Search & landing light, LED, fixed provisions	0.9	2.0
1	06-45082-F	**E3343-200-20**	Search & landing light, LED, detachable parts	3.7	8.2
1	06-67081-A	**E2562-000-00**	Emergency Locator Transmitter (ELT)	1.7	3.7
Avionics					
1	**08-00462-B**	**E2300-620-01**	**Avionics Package SP/DP IFR GTN 750Xi / Lynx / Canyon[b]**		
1	08-16164-C	**E2341-000-00**	Digital Audio Control System (DACS), incl. ACP53 (Canyon), pilot + copilot	5.8	12.8
1	08-22085-B	**E3451-500-00**	Transponder Lynx NGT9000R+ (ACSS)[c]	5.1	11.2
1	08-25519-A	**E3455-000-00**	Distance Measuring Equipment (DME) DME-4000 (Rockwell Collins)	2.7	6.0
1	08-26063-A	**E3431-000-00**	Marker beacon receiver MKR3300-1 (Becker)	1.2	2.6

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	08-43083-B	**E3463-001-01**	GPS/NAV/COM GTN 750Xi (Garmin), copilot[d]	7.5	16.5
1	08-43083-B	**E3463-002-01**	GPS/NAV/COM GTN 750Xi (Garmin), pilot[d]	7.9	17.4
1	08-65054-B	**E3161-001-00**	Flight Display Subsystem (FDS), copilot	8.4	18.5
1	08-99005-C	**E0000-151-00**	Avionics Package SP/DP IFR GTN Series interconnection / wiring	20.6	45.4
1	08-16166-A	**E2340-000-00**	Headset electrical power supply (28 VDC), fixed provisions[e]	0.5	1.1
1	08-21036-A	**E3441-000-00**	Radar altimeter KRA 405B (Honeywell)	3.3	7.3
1	08-35068-B	**E3446-000-00**	Helicopter Terrain Awareness and Warning System (H-TAWS) - Helionix[f]	0.1	0.2
1	08-35069-C	**E3446-100-00**	Synthetic Vision System (SVS) - Helionix[f]	0.0	0.0
1	08-53010-B	**E2213-000-00**	Additional Attitude and Heading Reference System (AHRS) & magnetometer	5.5	12.1
1	08-54004-B	**E3411-000-00**	Copilot pitot static system	2.9	6.4
1	08-65068-G	**E3315-502-00**	Universal tablet holder, pilot	1.0	2.2
1	08-65073-A	**E3161-100-00**	Helionix data connector	0.6	1.3
1	08-72007-A	**E2212-100-00**	4-axis Automatic Flight Control System (AFCS)	17.0	35.7
1	08-82002-B	**E3139-000-01**	Lightweight Aircraft Recording System (LARS)	0.6	1.3
Reference Equipment					
General Equipment					
1	05-02084-B	**E1111-300-00**	Complex exterior painting instead of standard painting	2.7	6,0
1	05-31146-C	**E2511-000-00**	Tinted sun shades for cockpit windshield roof section	1.8	4.0
1	05-31149-C	**E5611-300-00**	Tinted front windshields	0.0	0.0
1	05-31149-C	**E5632-300-00**	Tinted windows in cockpit doors	0.0	0.0
1	05-31149-C	**E5632-305-00**	Tinted windows in cabin incl. sliding windows in sliding doors	1.2	2.6
1	05-42051-B	**E2111-000-00**	Air Conditioning System (ACS)	52.1	114.9
1	05-85018-A	**E2841-000-00**	Fuel management system (fuel flow meters)	1.0	2.2
Specific Mission Equipment					
1	06-66025-B	**E3342-400-00**	Boarding step illuminations	0.3	0.7
Interior Layout					
1	07-30078-C	**E2581-100-00**	Enhanced sound proofing kit	30.0	66.1
1	07-30079-A	**E2521-100-00**	Separation wall for cabin / cargo compartment	4.4	9.7
1	07-50082-B	**E5231-000-00**	One-hand latching system for clam-shell doors	1.4	3.1
1	07-60049-B	**E2513-005-00**	Map cases in sliding doors	1.5	3.3
1	07-90036-B	**E2524-005-00**	Retractable coat hooks in rear cabin (2 hooks)	0.1	0.2
Interior Layout - ACH Line, 4 passengers					
1	**07-80056-F**	**AAT-35200-216-2**	**ACH Line, 4 passengers, 2 cabinets, package (AAT - STC)[g]**		
1	07-81129-C	**AAT-35230-220-2**	ACH Line height adjustable pilot seat instead of standard pilot seat[h]	2.6	5.7
1	07-81129-C	**AAT-35230-221-2**	ACH Line height adjustable copilot seat instead of standard copilot seat[h]	2.6	5.7
1	07-81130-E	**AAT-35230-212-2**	ACH Line front passenger seats (2 seats)	31.0	68.3
1	07-81130-E	**AAT-35230-214-2**	ACH Line rear passenger seats (2 seats)	27.4	60.4
4	07-81130-E	**AAT-35230-210-2**	ACH Line, upholstery for lower seat structure of passenger seat	2.4	5.3
1	07-82022-C	**AAT-35220-201-2**	ACH Line, armrests in rear window niches	0.6	1.3
1	07-83036-B	**AAT-35220-208-2**	ACH Line entrance rails	1.2	2.6
1	07-83037-C	**AAT-35210-201-2**	ACH Line carpet for cockpit	5.2	11.5

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	07-83037-C	**AAT-35210-202-2**	ACH Line carpet for cabin	2.8	6.2
1	07-83037-C	**AAT-35210-203-2**	ACH Line carpet for cargo compartment	3.5	7.7
1	07-83039-C	**AAT-35220-210-2**	ACH Line leather cuffs for flight controls	0.1	0.2
1	07-85056-D	**AAT-35240-202-2**	ACH Line rear cabinet with USB power sockets	20.1	44.3
1	07-85057-B	**AAT-35240-201-2**	ACH Line, front cabinet	27.1	59.7
1	07-86035-B	**AAT-35260-200-2**	ACH Line Passenger Service Units (PSU)	1.4	3.1
1	07-86036-B	**AAT-35220-204-2**	ACH Line metal placards	0.2	0.4
2	07-81140-B	**E2512-000-90**	ACH Line pilot seat protection cover[i]	0.0	0.0
4	07-81140-B	**E2522-000-90**	ACH Line passenger seat protection cover[i]	0.0	0.0
Avionics					
6	08-18079-C	**E2342-100-00**	Headset adapter cable, without IC/TX switch, Glenair/LEMO ANR, short	0.0	0.0
6	08-18080-B	**E2315-300-04**	Headset A20 ANR LEMO (Bose), bluetooth, high impedance	1.8	4.0
1	08-43080-A	**E3464-200-00**	Wireless connectivity Flight Stream 510 (Garmin)	0.0	0.0
1	08-46070-B	**E3169-000-00**	Moving map - Helionix[f]	0.0	0.0
			Subtotal weight[j]:	**373.1**	**822.5**
			Total Weight[j]:	**1,928.1**	**4,250.7**

a. Customization of first aid kit content necessary to comply with EASA AIR-OPS requirements. Medications may have to be removed for Export.
b. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
c. incl. ADS-B out, ADS-B in, TCAS I. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
d. SBAS RNP approach local service availability verification through your Airbus helicopter sales representative on request.
e. Required for Active Noise Reduction (ANR).
f. The database update service is provided under a dedicated service contract. Please contact your Airbus helicopter sales representative for further information.
g. This STC is only EASA certified. Prices and leadtimes for national certifications are available on request.
h. Incl. standard safety belt buckles.
i. GSE.
j. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

4.4.3 ACH Line - Color Moods and Interior Paintings

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	07-80056-F	**AAT-35290-170-1**	ACH Line, Oyster color mood	0.0	0.0
1	07-80056-F	**AAT-35290-171-1**	ACH Line, Lagoon color mood	0.0	0.0
1	07-80056-F	**AAT-35290-172-1**	ACH Line, Artic color mood	0.0	0.0
1	07-80056-F	**AAT-35290-173-1**	ACH Line, Earth color mood	0.0	0.0
1	07-80056-F	**AAT-35290-174-1**	ACH Line, Canyon color mood	0.0	0.0
1	07-80056-F	**AAT-35290-175-1**	ACH Line, Quartz color mood	0.0	0.0
1	07-80056-F	**E1150-100-00**	ACH Line interior painting, light beige (RAL 1013), semi-gloss finish	0.0	0.0
1	07-80056-F	**E1150-110-00**	ACH Line interior painting, dark grey (RAL 7043), semi-gloss finish	0.0	0.0

4.4.4 Mission Performance

Weight breakdown (with payload and fuel)

		kg	lb
Weight basis for Payload Range Diagram	Equipped empty weight ACH Line, 4 passengers, 2 cabinets, (incl. engine oil and unusable fuel)[a]	1,928	4,251
	1 pilot (1 x 85 kg)	85	187
Payload	4 passengers (4 x 85 kg)	340	750
Fuel	Reserve fuel: 20 min in 1,500 ft with 136 KTAS	71	157
	Contingency fuel: 5%	23	51
	Trip fuel	466	1,027
	Mission takeoff weight	2,913	6,422

a. Weight tolerance: ±1.5% on Baseline aircraft, ±3% on other equipment.

Mission profile

- Takeoff Cat. A Clear Heliport at SL
- Climb flight AEO MCP from SL to 5,000 ft with V_Y, mean 67 KTAS
- Level flight in 5,000 ft with V_{BR}, mean 138 KTAS
- Descent from 5,000 ft to SL with R/D of 1,000 fpm, mean 83 KTAS
- Landing Cat. A Clear Heliport at SL

Payload range diagram

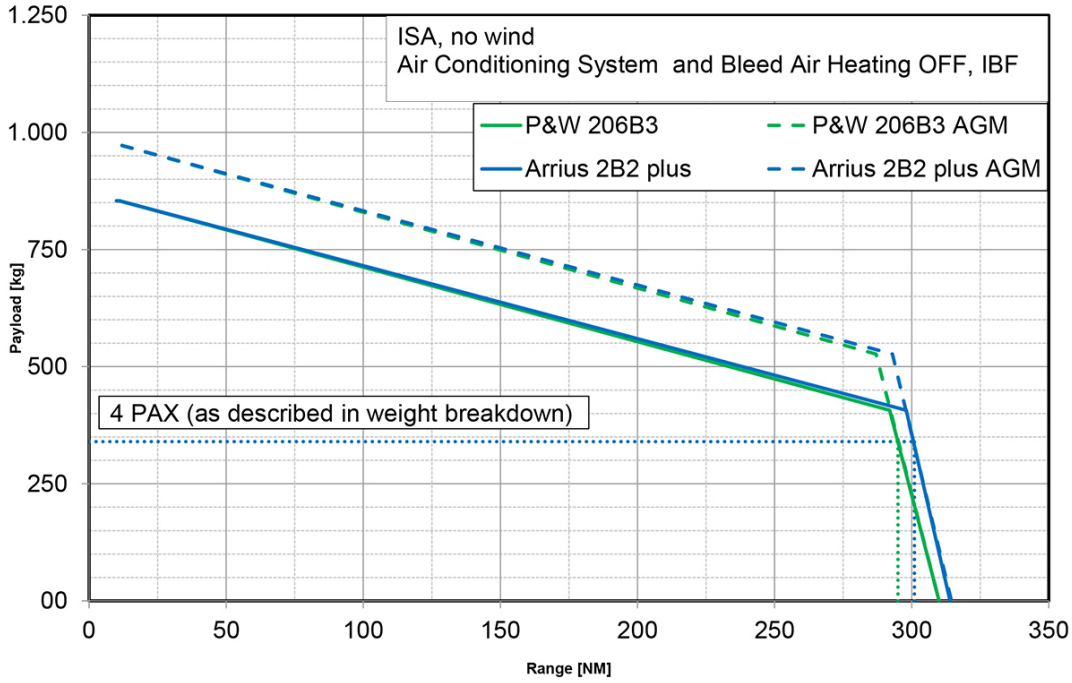


Figure 4.11: ACH Line, 4 passengers, 2 cabinets - payload range diagram

Relevant flight data

	PW206B3 engines	Arrius 2B2^{plus} engines
Calculated maximum range (without payload, with trip fuel)	310 NM (574 km)	314 NM (582 km)
Corresponding flight time	2 h 24 min	2 h 25 min

Blank

5 Further Equipment Information

5.1 General Available Equipment

The following list presents the General Available Equipment which may be added to customize the mission configurations or to build specific configurations. Further mission specific equipment is also available on request. Any modification and/or complement of the proposed mission configuration, shall be done with the assistance of an Airbus helicopter sales representative to avoid incompatibilities between various optional equipment items.

Abbreviation	Availability
G	General Available Equipment for the mission configuration
R	Included in the Mandatory or Reference Equipment of the mission configuration

Document Reference	Commercial Reference	Description	kg	lb	Passenger Transp.	ACH Line
Yacht Interface Available Equipment*						
*For EASA AIR-OPS compliance please refer to chapter 5.5						
05-12010-A	**E7110-300-00**	Maintenance step on cabin roof, LH	0,7	1.5	G	G
05-25037-D	**E7162-000-00**	Inlet Barrier Filter (IBF) system	18.9	41.7	G	G
05-25037-D	**E7162-000-90**	Inlet Barrier Filter (IBF) maintenance kit and spare filter set[a]	0.0	0.0	G	G
05-26020-A	**E1241-100-00**	Corrosion protection for high corrosive environment	3.2	7.1	G	G
05-92019-B	**E6611-000-00**	Main rotor blade folding, basic kit	1.5	3.3	G	G
05-92019-B	**E6611-100-10**	Main rotor blade folding, fixed provisions for ground handling kit	0.8	1.8	G	G
05-92019-B	**E6611-100-90**	Main rotor blade folding, ground handling kit[a]	0.0	0.0	G	G
05-93017-A	**E1021-000-10**	Lashing points for wind speeds up to 40 kts, fixed provisions	0.8	1.8	G	G
05-93017-A	**E1021-000-20**	Lashing points for wind speeds up to 40 kts, detachable parts	0.8	1.8	G	G
05-93018-A	**E1021-100-10**	Lashing points for ship landings, fixed provisions	2.0	4.4	G	G
05-93018-A	**E1021-100-20**	Lashing points for ship landings, detachable parts	0.3	0.7	G	G
05-61036-C	**E3214-000-00**	Emergency floats, lengthened cranked skids	14.1	31.1	G	G
06-61036-C	**E3215-100-10**	Emergency floats, fixed provisions[b]	9.7	21.4	G	G
06-61036-C	**E3215-100-30**	Emergency floats, vendor parts[c]	50.1	110.5	G	G
06-62034-B	**E2565-001-10**	External Life Raft System (ELRS) LH, fixed provisions	0.8	1.8	G	G
06-62034-B	**E2565-001-20**	External Life Raft System (ELRS) LH, detachable parts[d]	36.3	80.0	G	G
06-62034-B	**E2565-002-10**	External Life Raft System (ELRS) LH, fixed provisions	0.8	1.8	G	G
06-62034-B	**E2565-002-20**	External Life Raft System (ELRS) LH, detachable parts[d]	37.4	82.5	G	G
06-62034-B	**E2562-600-00**	Survival emergency locator transmitter ELT(S)	0.7	1.5	G	G
06-67080-A	**E2562-400-00**	Automatic Deployable Emergency Locator Transmitter (ADELT)	10.0	22.0	G	G
08-12101-A	**E2312-000-00**	Tactical radio VHF-FM NPX138N (Canyon)[e]	2.4	5.3	G	G

Document Reference	Commercial Reference	Description	kg	lb	Passenger Transp.	ACH Line
General Equipment						
05-02084-B	**E1111-100-00**	Enhanced exterior painting instead of standard painting	2.0	4.4	R	G
05-02084-B	**E1111-300-00**	Complex exterior painting instead of standard painting	2.7	6.0	G	R
05-02085-C	**E6211-000-00**	High visibility paint for main rotor blades	0.0	0.0	G	G
05-02086-A	**E1111-900-00**	Surface protective coating (Airglaze)	0.5	1.1	G	G
05-02087-C	**E6211-100-00**	Main rotor blade erosion protection paint	0.0	0.0	G	G
05-12011-B	**E2516-000-00**	Boarding grips for cockpit	0.1	0.2	G	G
05-12013-A	**E7110-000-00**	Handles on main gearbox cowling LH & RH	0.6	1.3	G	G
05-21036-C	**E8541-000-10**	Cable cutter system, fixed provisions	3.8	8.4	G	G
05-21036-C	**E8541-000-20**	Cable cutter system, detachable parts	8.1	17.9	G	G
05-22034-A	**E7111-000-01**	Engine cowling heat protection, extended	1.7	3.7	G	G
05-31147-B	**E5632-005-00**	Sliding windows in sliding doors	1.2	2.6	G	G
05-31148-A	**E5633-001-00**	Window in clam-shell door LH	0.3	0.7	G	G
05-31148-A	**E5633-002-00**	Window in clam-shell door RH	0.3	0.7	G	G
05-31152-B	**E5632-100-00**	Ram air deflectors for sliding windows in cockpit doors	0.6	1.3	G	G
05-31152-B	**E5632-105-00**	Ram air deflectors for sliding windows in sliding doors	0.4	0.9	G	G
05-31155-A	**E5632-405-00**	Push-out rear cabin windows	2.1	4.6	G	G
05-33008-A	**E2513-100-00**	Map case on center console, LH	0.5	1.1	G	G
05-39023-A	**E3315-101-00**	Illuminated chart holder, copilot	0.8	1.8	G	G
05-39023-A	**E3315-102-00**	Illuminated chart holder, pilot	0.8	1.8	G	G
05-44014-B	**E2122-100-00**	Ventilation enhancement for cockpit	0.9	2.0	G	G
05-52016-A	**E3123-000-00**	Ice detection system[f]	5.3	11.7	G	G
05-67055-C	**E2461-001-01**	Power sockets (USB 1x type A, 1x type C), copilot	0.2	0.4	G	G
05-67055-C	**E2461-200-01**	Power sockets (USB 1x type A, 1x type C), center console	0.2	0.4	G	G
05-67055-C	**E2461-300-00**	Power sockets (USB 1x type A, 1x type C on each side), LH & RH cabin window niche	1.0	2.2	R	G
05-81054-A	**E2818-000-10**	Internal long range fuel tank system, fixed provisions	2.6	5.7	G	G
05-81054-A	**E2818-000-20**	Internal long range fuel tank system, detachable parts	36.2	79.8	G	G
05-91014-A	**E0910-000-00**	Ground handling wheels[a]	0.0	0.0	G	G
05-95006-A	**E1320-300-00**	Main rotor head cover[a]	0.0	0.0	G	G
05-95008-A	**E1320-100-00**	Short term cover kit for helicopter[a]	0.0	0.0	G	G
05-97006-B	**E6201-100-00**	Accelerometers for track and balance system (Chadwick Helmuth)	0.0	0.0	G	G
05-97007-B	**E6201-200-10**	Optical tracker FasTrak 11800-3 (Chadwick Helmuth), fixed provisions	0.0	0.0	G	G
05-97007-B	**E6201-200-20**	Optical tracker FasTrak 11800-3 (Chadwick Helmuth), detachable parts	0.6	1.3	G	G

Document Reference	Commercial Reference	Description	kg	lb	Passenger Transp.	ACH Line
Specific Mission Equipment						
06-11044-A	**E3274-000-10**	Settling protectors, fixed provisions	0.1	0.2	G	G
06-11044-A	**E3274-000-20**	Settling protectors, detachable parts	8.1	17.9	G	G
06-11045-B	**E3272-000-10**	Snow skids, fixed provisions	0.9	2.0	G	G
06-11045-B	**E3272-000-20**	Snow skids, detachable parts	18.3	40.3	G	G
06-12028-A	**E3210-100-00**	Medium height landing gear instead of standard landing gear	5.3	11.7	G	G
06-12029-A	**E3213-100-00**	Extended skid protection	3.3	7.3	G	G
06-12033-B	**E3214-100-00**	Lengthened landing skids instead of standard landing skids	0.7	1.5	G	G
06-12034-A	**E3271-000-00**	Skid protectors (ice claw)	3.1	6.8	G	G
06-12036-A	**E3210-300-00**	ACH landing gear	7.2	15.9		G
06-26029-A	**E3181-000-10**	External multi-purpose camera on tail boom, fixed provisions	2.0	4.4	G	G
06-26029-A	**E3181-000-20**	External multi-purpose camera on tail boom, detachable parts	0.8	1.8	G	G
06-26029-A	**E3181-100-10**	External rear-view camera on landing gear, fixed provisions	1.5	3.3	G	G
06-26029-A	**E3181-100-20**	External rear-view camera on landing gear, detachable parts	1.4	3.1	G	G
06-27049-D	**E8511-000-10**	Single cargo hook system, fixed provisions	5.0	11.0	G	G
06-27049-D	**E8511-000-20**	Single cargo hook system, detachable parts	25.9	57.1	G	G
06-27049-D	**E8511-800-10**	Cargo hook weighing system, fixed provisions	0.2	0.4	G	G
06-27049-D	**E8511-800-20**	Cargo hook weighing system, detachable parts	0.2	0.4	G	G
06-42053-A	**E3343-601-00**	Additional landing light on FWD cross tube, LH	1.7	3.7	G	G
06-42053-A	**E3343-602-00**	Additional landing light on FWD cross tube, RH	1.7	3.7	G	G
06-45082-F	**E3343-000-10**	Search & landing light, halogen, fixed provisions	1.2	2.6	G	
06-45082-F	**E3343-000-20**	Search & landing light, halogen, detachable parts	2.2	4.9	G	
06-45082-F	**E3343-100-10**	2nd Search & landing light, halogen, fixed provisions	1.5	3.3	G	
06-45082-F	**E3343-100-20**	2nd Search & landing light, halogen, detachable parts	2.2	4.9	G	
06-45082-F	**E3343-300-10**	2nd Search & landing light, LED, fixed provisions	1.5	3.3	G	G
06-45082-F	**E3343-300-20**	2nd Search & landing light, LED, detachable parts	3.7	8.2	G	G
06-45082-F	**E3343-900-00**	Search & landing light, LED, IR mode	0.1	0.2	G	
06-46012-A	**E3344-100-00**	White strobe lights	1.2	2.6	G	G
06-65016-C	**E2625-100-00**	2nd portable fire extinguisher	2.9	6.4	G	G
06-66024-B	**E3353-000-00**	Emergency lights incl. boarding step illuminations	1.5	3.3	G	G
06-66027-B	**E3323-000-00**	Illuminated signs "NO SMOKING / FASTEN SEAT BELT"	0.7	1.5	G	G
06-71011-B	**E2521-500-20**	Separation curtain for cockpit / cabin, detachable parts	0.3	0.7	G	
06-90014-B	**E0000-500-00**	Alternate gross weight 3,100 kg[f]	0.0	0.0	G	G

Document Reference	Commercial Reference	Description	kg	lb	Passenger Transp.	ACH Line
Interior Layout						
07-15035-C	**E2512-202-00**	Advanced pilot seat instead of standard pilot seat	2.0	4.4	G	
07-15035-C	**E2512-201-00**	Advanced pilot seat instead of standard copilot seat	2.0	4.4	G	
07-27035-E	**E2522-005-00**	Passenger seating, 3 seats with 3-point restraint system (front row, facing against flight direction)	37.4	82.5	G	
07-27035-E	**E2522-105-00**	Passenger seating, 2 seats with 3-point restraint system (rear row, facing in flight direction)	22.2	48.9	G	
07-27035-E	**E2522-307-01**	Passenger seating, 1 seat with 4-point single latch restraint system (rear row, facing in flight direction, LH)	12.0	26.5	R	
07-27035-E	**E2522-308-01**	Passenger seating, 1 seat with 4-point single latch restraint system (rear row, facing in flight direction, RH)	12.0	26.5	R	
07-27035-E	**E2522-006-01**	Passenger seating, 3 seats with 4-point single latch restraint system (front row, facing against flight direction)	38.8	85.5	R	
07-27037-D	**E2522-106-10**	Passenger seating, 3 utility seats with 4-point restraint system (rear row, facing in flight direction), fixed provisions	1.7	3.7	G	
07-27037-D	**E2522-106-21**	Passenger seating, 3 utility seats with 4-point restraint system (rear row, facing in flight direction), detachable parts	33.2	73.2	G	
07-30078-C	**E2581-100-00**	Enhanced sound proofing kit	30.0	66.1	G	R
07-30079-A	**E2521-100-00**	Separation wall for cabin / cargo compartment	4.4	9.7	G	R
07-40037-C	**E2532-000-00**	Sealed cabin floor	0.3	0.7	G	G
07-50082-B	**E5231-000-00**	One-hand latching system for clam-shell doors	1.4	3.1	G	R
07-50083-A	**E5231-100-00**	Extended opening fasteners for clam-shell doors	0.1	0.2	G	G
07-50084-A	**E5213-101-00**	Sliding door fastener, max. position, LH	0.3	0.7	G	G
07-50084-A	**E5213-102-00**	Sliding door fastener, max. position, RH	0.3	0.7	G	G
07-50085-B	**E5212-000-00**	Jettisonable cockpit doors	0.9	2.0	G	G
07-50089-A	**E5211-200-00**	Securing device for complete opening of cockpit doors	0.8	1.8	G	G
07-60049-B	**E2513-005-00**	Map cases in sliding doors	1.5	3.3	G	R
07-60050-B	**E2550-000-00**	Variable tie-down net	3.2	7.1	G	G
07-60053-B	**E5231-202-00**	Stowage net on clam-shell door, RH	0.4	0.9	G	G
07-80056-F	**AAT-35200-236-2**	**ACH Line, 4 passengers, 1 cabinet, package (AAT - STC)[g]**				**G**
07-81129-C	**AAT-35230-220-2**	ACH Line, height adjustable pilot seat instead of standard pilot seat[h]	2.6	5.7		
07-81129-C	**AAT-35230-221-2**	ACH Line, height adjustable copilot seat instead of standard copilot seat[h]	2.6	5.7		
07-81130-E	**AAT-35230-212-2**	ACH Line, front passenger seats (2 seats)	31.0	68.3		
07-81130-E	**AAT-35230-214-2**	ACH Line, rear passenger seats (2 seats)	27.4	60.4		
07-81130-E	**AAT-35230-210-2**	ACH Line, upholstery for lower seat structure of passenger seat	2.4	5.3		
07-82022-C	**AAT-35220-201-2**	ACH Line, armrests in rear window niches	0.6	1.3		
07-83036-B	**AAT-35220-208-2**	ACH Line, entrance rails	1.2	2.6		
07-83037-C	**AAT-35210-201-2**	ACH Line, carpet for cockpit	5.2	11.5		
07-83037-C	**AAT-35210-202-2**	ACH Line, carpet for cabin	2.8	6.2		
07-83037-C	**AAT-35210-203-2**	ACH Line, carpet for cargo compartment	3.5	7.7		

Document Reference	Commercial Reference	Description	kg	lb	Passenger Transp.	ACH Line
07-83039-C	**AAT-35220-210-2**	ACH Line, leather cuffs for flight controls	0.1	0.2		
07-85056-D	**AAT-35240-202-2**	ACH Line, rear cabinet with USB power sockets	20.1	44.3		
07-81149-B	**AAT-35210-210-2**	ACH Line, front middle seat frame cover	3.2	7.1		
07-86035-B	**AAT-35260-200-2**	ACH Line, Passenger Service Units (PSU)	1.4	3.1		
07-86036-B	**AAT-35220-204-2**	ACH Line, metal placards	0.2	0.4		
07-81140-B	**E2512-000-90**	ACH Line, pilot seat protection cover[a]	0.0	0.0		
07-81140-B	**E2522-000-90**	ACH Line, passenger seat protection cover[a]	0.0	0.0		
07-83037-D	**AAT-35210-208-2**	ACH Line, Additional carpet beneath the passenger seats	3.0	6.6		G
07-86019-B	**E1150-000-00**	Special interior painting[i]	0.0	0.0		
07-86044-A	**E1150-300-00**	Antimicrobial interior coating[i]	1.2	2.6	G	G
07-91127-C	**AAT-35220-220-2**	ACH Line, interior panels upholstered with leather	10.7	23.6		G
07-91127-C	**AAT-35290-225-2**	ACH Line, leather upholstery for map cases in sliding doors	1.2	2.6		G
07-91127-C	**AAT-35290-226-2**	ACH Line, leather upholstery for map cases in cockpit doors	0.6	1.3		G
07-91128-A	**AAT-35220-230-2**	ACH Line, carbon map cases	0.4	0.9		G
07-91141-B	**AAT-35210-206-2**	ACH Line, change of carpet into Corporate carpet	0.0	0.0		G
07-91141-B	**AAT-35290-198-2**	ACH Line, change of ACH Line safety belt color	0.0	0.0		G
07-91141-B	**AAT-35290-193-2**	ACH Line, change of ACH Line carbon into wooden surface (AH Catalogue)	0.0	0.0		G
07-91141-B	**AAT-35290-192-2**	ACH Line, change of ACH Line leather type and color (AH Catalogue)	0.0	0.0		G
07-91141-B	**AAT-35290-200-2**	ACH Line, change of carpet color[i]	0.0	0.0		
07-91141-B	**AAT-35290-201-2**	ACH Line, change of cabin safety belt buckle and outlets into metal[j]	0.0	0.0		G
07-91141-B	**AAT-35290-202-2**	ACH Line, change of cockpit safety belt buckle and outlets into metal[j]	0.0	0.0		G
07-91156-A	**AAT-35290-216-2**	ACH Line, metal plating for bleed air heating knob, coat hooks and headset holders in cabin	0.0	0.0		G
Avionics						
08-00462-B	**E2300-720-01**	**Avionics Package SP/DP IFR GTN 750Xi / Lynx / Becker[f]**			**G**	**G**
08-16169-C	**E2341-500-00**	Digital Voice Control System (DVCS), Audio Control Unit ACU 6100 (pilot + copilot) and REU 6100 (Becker)	7.8	17.2		
08-22085-B	**E3455-500-00**	Transponder Lynx NGT9000R+ (ACSS)[k]	5.1	11.2		
08-25519-A	**E3455-000-00**	Distance Measuring Equipment (DME) DME-4000 (Rockwell Collins)	2.7	6.0		
08-26063-A	**E3431-000-00**	Marker beacon receiver MKR3300-1 (Becker)	1.2	2.6		
08-43083-B	**E3463-001-01**	GPS/NAV/COM GTN 750Xi (Garmin), copilot[l]	7.5	16.5		
08-43083-B	**E3463-002-01**	GPS/NAV/COM GTN 750Xi (Garmin), pilot[l]	7.9	17.4		
08-65054-B	**E3161-001-00**	Flight Display Subsystem (FDS), copilot	8.4	18.5		
08-99005-C	**E0000-151-00**	Avionics Package SP/DP IFR GTN Series interconnection / wiring	20.6	45.4		

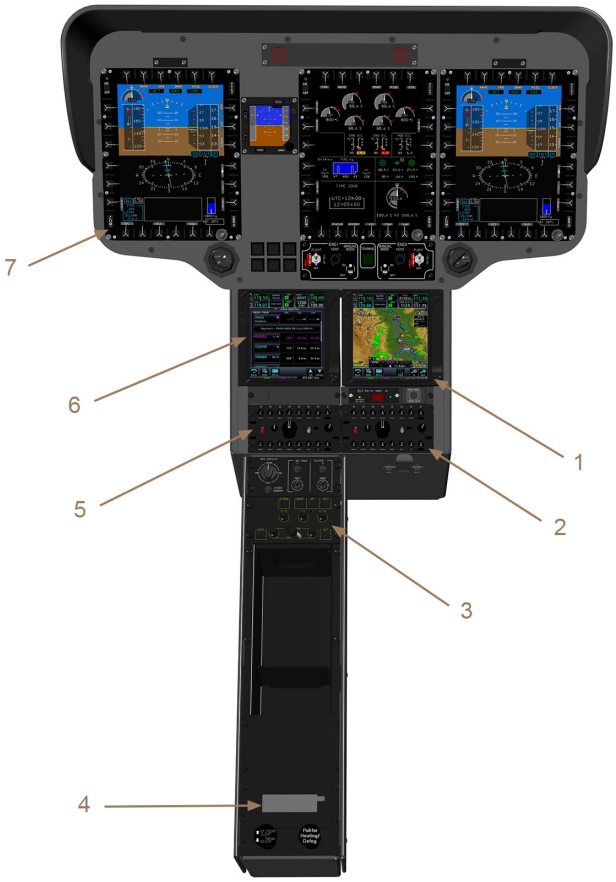
Document Reference	Commercial Reference	Description	kg	lb	Passenger Transp.	ACH Line
08-00465-A	**E2300-722-01**	**Avionics Package SP IFR GTN 750Xi / Lynx / Becker**[f]			**G**	**G**
08-16169-C	**E2341-500-00**	Digital Voice Control System (DVCS), Audio Control Unit ACU 6100 (pilot + copilot) and REU 6100 (Becker)	7.8	17.2		
08-22085-B	**E3455-500-00**	Transponder Lynx NGT9000R+ (ACSS)[k]	5.1	11.2		
08-25519-A	**E3455-000-00**	Distance Measuring Equipment (DME) DME-4000 (Rockwell Collins)	2.7	6.0		
08-26063-A	**E3431-000-00**	Marker beacon receiver MKR3300-1 (Becker)	1.2	2.6		
08-43083-B	**E3463-001-01**	GPS/NAV/COM GTN 750Xi (Garmin), copilot[l]	7.5	16.5		
08-43083-B	**E3463-002-01**	GPS/NAV/COM GTN 750Xi (Garmin), pilot[l]	7.9	17.4		
08-99005-C	**E0000-152-00**	Avionics Package SP IFR GTN Series interconnection / wiring	20.6	45.4		
08-10026-B	**E2311-000-10**	HF system HF-9000 (Rockwell Collins), fixed provisions[mi]	7.2	15.9		
08-10026-B	**E2311-000-20**	HF system HF-9000 (Rockwell Collins), detachable parts[mi]	19.2	42.3		
08-12102-C	**E2317-000-00**	Tactical radio, fixed provisions, incl. antenna, power supply & intercom interface[e]	2.1	4.6	G	G
08-15568-B	**E2315-400-00**	LTE phone, fixed provisions, incl. antenna, power supply (28 VDC) & intercom interface[n]	1.1	2.4	G	G
08-15570-B	**E2315-000-00**	Iridium satellite transceiver GSR 56 (Garmin)[o]	2.9	6.4	G	G
08-17114-A	**E2334-000-00**	Passenger address interface	0.6	1.3	G	G
08-18078-A	**E2315-100-00**	Headset H 10-76 (David Clark), low impedance	0.6	1.3	G	G
08-18078-A	**E2315-200-00**	Headset H 10-56 (David Clark), high impedance	0.6	1.3	G	G
08-18079-C	**E2342-000-00**	Headset adapter cable, without IC/TX switch, Glenair/U92, short	0.1	0.2	G	G
08-18079-C	**E2342-005-00**	Headset adapter cable, with IC/TX switch, Glenair/U92, long	0.3	0.7	G	G
08-18079-C	**E2342-105-00**	Headset adapter cable, with IC/TX switch, Glenair/LEMO ANR, long	0.2	0.4	G	G
08-24038-A	**E3452-100-00**	Automatic Direction Finder (ADF), control unit CDF552 (Canyon)	1.1	2.4	G	G
08-24038-A	**E3452-000-00**	Automatic Direction Finder (ADF), receiver DF-431B (Canyon)	10.5	23.1	G	G
08-31070-B	**E3443-200-00**	Weather radar RDR 2000 (Honeywell), radar radome	0.9	2.0	G	G
08-31070-B	**E3443-000-10**	Weather radar RDR 2000 (Honeywell), fixed provisions	0.9	2.0	G	G
08-31070-B	**E3443-020-30**	Weather radar RDR 2000 incl. control unit CP466 - NVG (Honeywell), vendor parts	6.6	14.6	G	G
08-43083-B	**E3463-600-00**	Approach charts (IFR) georeferenced for GTN 750 Series (Garmin)[l]	0.0	0.0	G	G
08-43083-B	**E3463-700-00**	Mark on target for GTN Series (Garmin)	0.1	0.2	G	G
08-43083-B	**E3463-901-00**	Enablement of increased transmission power for GTN Series (Garmin), copilot	0.0	0.0	G	G
08-43083-B	**E3463-902-00**	Enablement of increased transmission power for GTN Series (Garmin), pilot	0.0	0.0	G	G
08-46068-E	**E3168-000-00**	Moving map EuroNav 7 – RN7 (Hensoldt), basic version[p]	6.4	14.1	G	G
08-46068-E	**E3168-100-00**	Moving map EuroNav 7 – RN7 (Hensoldt), Skytrac Iridium satcom module	0.7	1.5	G	G

Document Reference	Commercial Reference	Description	kg	lb	Passenger Transp.	ACH Line
08-46068-E	**E3168-400-01**	Moving map EuroNav 7 – RN7 (Hensoldt), LTE module	0.3	0.7	G	G
08-46068-E	**E3168-300-00**	Moving map EuroNav 7 – RN7 (Hensoldt), FLARM module	0.5	1.1	G	G
08-46068-E	**E3168-600-00**	Moving map EuroNav 7 – RN7 (Hensoldt), weather radar interface	0.0	0.0	G	G
08-65068-G	**E3315-301-00**	iPad mini holder, copilot	0.6	1.3	G	G
08-65068-G	**E3315-302-00**	iPad mini holder, pilot	0.6	1.3	G	G
08-65068-G	**E3315-401-00**	iPad Air 2 holder, copilot	0.7	1.5	G	G
08-65068-G	**E3315-402-00**	iPad Air 2 holder, pilot	0.7	1.5	G	G
08-65068-G	**E3315-501-00**	Universal tablet holder, copilot	1.0	2.2	G	G
08-81048-B	**E3132-000-11**	Cockpit Voice and Flight Data Recorder (CVFDR), fixed provisions	2.9	6.4	G	G
08-81048-B	**E3132-000-21**	Cockpit Voice and Flight Data Recorder (CVFDR), detachable parts	5.3	11.7	G	G
08-83047-B	**E3171-000-10**	Health Monitoring System (HMS), fixed provisions	3.1	6.8	G	G
08-83047-B	**E3171-000-20**	Health Monitoring System (HMS), detachable parts	2.7	6.0	G	G
08-83048-B	**E3171-200-00**	Professional Ground Station (PGS) Vision System[q]	0.0	0.0	G	G
08-83049-B	**E3171-100-00**	Professional Ground Station (PGS) Analysis & 3D replay[a]	0.0	0.0	G	G

a. GSE.
b. Incl. auto-activation. Lengthened cranked landing skids not included.
c. Lengthened cranked landing skids not included.
d. Operator to equip ELT(S) meeting ICAO Annex 10 requirements to comply with EASA AIR-OPS.
e. Onboard HF/tact. radio transm. can influence radio NAV systems (MKR, VOR, ILS, ADF) and COM systems (VHF/other tact. radio). Depending on NAA cert. requirements, such systems must be not used, turned off or deactivated during IFR approaches/departures.
f. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
g. This STC is only EASA certified. Prices and leadtimes for national certifications are available on request.
h. Incl. standard safety belt buckles.
i. This item is available on request.
j. For 1 seat.
k. incl. ADS-B out, ADS-B in, TCAS I. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
l. SBAS RNP approach local service availability verification through your Airbus helicopter sales representative on request.
m. Onboard HF/tact. radio transm. can influence radio NAV systems (MKR, VOR, ILS, ADF) and COM systems (VHF/other tact. radio). Depending on NAA cert. requirements, such systems must be not used, turned off or deactivated during IFR approaches/departures. Export clearance needs to be clarified by Airbus helicopter sales representative. HF-9000 is delivered inoperative if the helicopter is delivered under FAA certification. The active HF-9000 is not part of the FAA system certification.
n. LTE phone integration and EASA certification not included.
o. The use of the GSR56 is subject to the subscription of services provided by Garmin. The subscription is not provided by Airbus and is under customer's responsibility.
p. Incl. 512 GB flashdisk and Global Map Package.
q. GSE; Recommended 1 per customer base if CVFDR is selected.

5.2 Avionics Layout

Single / Dual Pilot IFR with dual GTN 750Xi (Garmin)



1. GPS / NAV / COM GTN 750Xi (Garmin), pilot
2. Audio Control Panel ACP53 (Cobham), pilot
3. Cockpit Control Panel (CCP)
4. Data Transfer Device (DTD)
5. Audio Control Panel ACP53 (Cobham), copilot
6. GPS / NAV / COM GTN 750Xi (Garmin), copilot
7. Flight Display Subsystem (FDS), copilot

Figure 5.1: Avionics layout for Single / Dual Pilot IFR GTN 750Xi (Garmin)

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	**08-00462-B**	**E2300-620-01**	**Avionics Package SP/DP IFR GTN 750Xi / Lynx / Canyon**[a]		
1	08-16164-C	**E2341-000-00**	Digital Audio Control System (DACS), incl. ACP53 (Canyon), pilot + copilot	5.8	12.8
1	08-22085-B	**E3451-500-00**	Transponder Lynx NGT9000R+ (ACSS)[b]	5.1	11.2
1	08-25519-A	**E3455-000-00**	Distance Measuring Equipment (DME) DME-4000 (Rockwell Collins)	2.7	6.0
1	08-26063-A	**E3431-000-00**	Marker beacon receiver MKR3300-1 (Becker)	1.2	2.6
1	08-43083-B	**E3463-001-01**	GPS/NAV/COM GTN 750Xi (Garmin), copilot[c]	7.5	16.5
1	08-43083-B	**E3463-002-01**	GPS/NAV/COM GTN 750Xi (Garmin), pilot[c]	7.9	17.4
1	08-65054-B	**E3161-001-00**	Flight Display Subsystem (FDS), copilot	8.4	18.5
1	08-99005-C	**E0000-151-00**	Avionics Package DP IFR GTN Series interconnection / wiring	20.6	45.4

a. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
b. incl. ADS-B out, ADS-B in, TCAS I. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
c. SBAS RNP approach local service availability verification through your Airbus helicopter sales representative on request.

Single Pilot IFR with dual GTN 750Xi (Garmin)

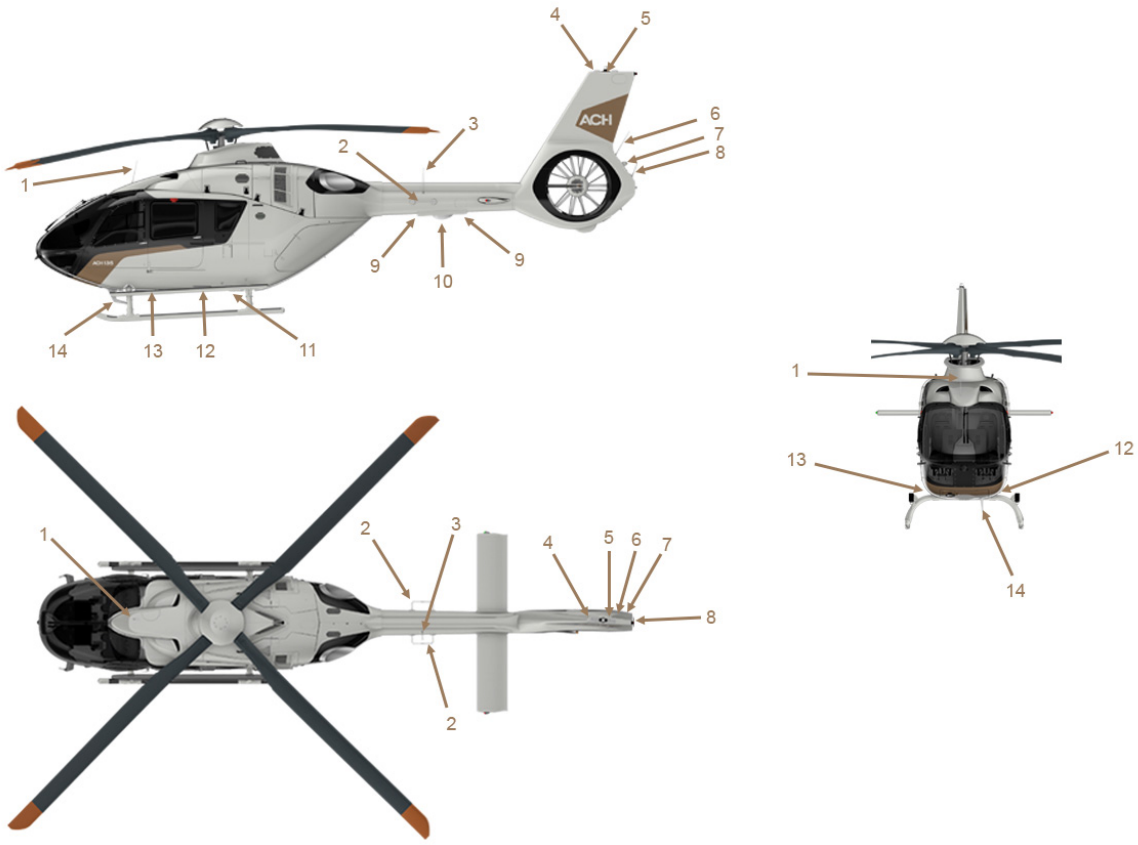
1. GPS / NAV / COM GTN 750Xi (Garmin), pilot
2. Audio Control Panel ACP53 (Cobham), pilot
3. Cockpit Control Panel (CCP)
4. Data Transfer Device (DTD)
5. Audio Control Panel ACP53 (Cobham), copilot
6. GPS / NAV / COM GTN 750Xi (Garmin), copilot

Figure 5.2: Avionics layout Single Pilot IFR GTN 750Xi (Garmin)

Qty	Document Reference	Commercial Reference	Description	kg	lb
1	**08-00465-A**	**E2300-622-01**	**Avionics Package SP IFR GTN 750Xi / GTX 335R / Canyon**[a]		
1	08-16164-C	**E2341-000-00**	Digital Audio Control System (DACS), incl. ACP53 (Canyon), pilot + copilot	5.8	12.8
1	08-22085-B	**E3451-500-00**	Transponder Lynx NGT9000R+ (ACSS)[b]	5.1	11.2
1	08-25519-A	**E3455-000-00**	Distance Measuring Equipment (DME) DME-4000 (Rockwell Collins)	2.7	6.0
1	08-26063-A	**E3431-000-00**	Marker beacon receiver MKR3300-1 (Becker)	1.2	2.6
1	08-43083-B	**E3463-001-01**	GPS/NAV/COM GTN 750Xi (Garmin), copilot[c]	7.5	16.5
1	08-43083-B	**E3463-002-01**	GPS/NAV/COM GTN 750Xi (Garmin), pilot[c]	7.9	17.4
1	08-99005-C	**E0000-152-00**	Avionics Package SP IFR GTN Series interconnection / wiring	20.6	45.4

a. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
b. incl. ADS-B out, ADS-B in, TCAS I. Product offered with EASA certification. The availability of other certifications needs to be confirmed by Airbus helicopter sales representative.
c. SBAS RNP approach local service availability verification through Airbus Helicopters on request.

5.3 Antenna Layout



1. ELT antenna	6. FM Antenna	11. ATC antenna
2. VOR / ILS antenna	7. IRIDIUM antenna	12. Marker antenna
3. VHF / AM 2 antenna	8. TETRA antenna	13. DME antenna
4. GPS 2 antenna	9. Radar altimeter antenna	14. VHF-AM 1 antenna
5. GPS 1 antenna	10. ADF antenna	

Figure 5.3: Typical IFR antenna layout

5.4 NVG friendly & NVIS Certification

In order to increase mission capabilities and flight safety during night operations, the ACH135 can be fitted with NVG friendly cockpit and cabin layouts as well as NVG friendly exterior lighting. Helicopters in an "NVG friendly" configuration are designed and built in order to not degrade the NVG image performance, by considering the design standards detailed hereafter:

- The internal lighting is designed and built in order to fulfill RTCA/DO-275 "Minimum Operational Performance Standard for Integrated Night Vision Imaging System Equipment".
  - All NVIS equipment items installed (excluding BFE and STCs) are not degrading the NVG image performance or the NVG image performance degradation is kept within acceptable limits in NVG mode.
  - The interior of the helicopter is kept in dark, matt colors, showing no or only little reflectance of radiation, not degrading the NVG image performance in NVG mode.
  - An appropriate Day/Night/NVG switch is provided.
- The external lighting is designed and built in order to fulfill SAE-ARP 4392, "Lighting, Aircraft Exterior, Night Vision Imaging System (NVIS) Compatible", i.e. the NVG performance degradation caused by the external lighting system in NVG mode is kept within acceptable limits.

NOTE: BFE and STC might not be compliant in accordance with the applicable specifications and requirements. Airbus does not perform any actions to ensure the NVG performance degradation is being kept within acceptable limits.

The EASA NVIS certification is available on request and is based on one customer specific configuration; any additional changes to the configuration following EASA NVIS certification may require additional certification effort. The EASA NVIS certification is based on specific night vision goggles with class B filters. For possible night vision goggles see option sheet "Night Vision Imaging System (NVIS) Certification".

On customer's request, Airbus Helicopters can evaluate and offer the certification of further night vision goggle systems from other manufacturers.

Unaided night flight capability remains unaffected. For the avoidance of doubt, configurations marked as being "NVG friendly" in this document do not include a helicopter NVIS certification. Such "Night Vision Imaging System (NVIS) certification" is only provided by Airbus Helicopters, if it is explicitly listed in the individual customer's contract. The "Night Vision Imaging System (NVIS) certification" provides proof of compliance with the airworthiness requirements for the NVG operations capabilities of the helicopter and includes delivery of a customer configuration specific Flight Manual Appendix ("Appendix for Night Vision Imaging Systems (NVIS) / NVG - Operator") and "Operator Substantiation Report for Night Vision Imaging System (NVIS) / NVG". Note that the "Night Vision Imaging System (NVIS) certification" does not constitute an approval for NVG operations as per Commission Regulation No 965/2012, SPA.NVIS.100 ("Helicopters shall only be operated under VFR at night with the aid of NVIS if the operator has been approved by the competent authority").

5.5 Disclaimers

Operational regulations

The Customer is responsible for the identification of instruments and equipment required to comply with the relevant regulations (e.g. CVFDR, ELT or chart holder may be required by the European Air Operations Regulation (EU Regulation n° 965/2012, so called EASA AIR-OPS)). Based on the mission parameters defined by the Customer and upon request, Airbus Helicopters can advise the Customer on the identification of instruments and equipment required to comply with EASA AIR-OPS.

Export control regulations

Airbus Helicopters is committed to strict compliance with all applicable export control regulations and requires a corresponding commitment from the Customer.

Some items/commodities are controlled under at least one export control law or regulation and therefore may require export authorization(s) and Airbus Helicopters cannot guarantee that they will be granted. Nevertheless Airbus Helicopters will perform all necessary procedures for obtaining such authorization(s).

The Customer shall support the authorization(s) application(s) procedure(s) by providing the necessary documentation and information, particularly end-user certificates, undertakings, documents on the utilization of the items/commodities, etc. The Customer shall comply with the conditions of the export authorization(s).

Airbus Helicopters reserves the right to deliver the helicopter without the controlled items, should the competent authorities deny or delay export authorization(s). The same is valid if the competent authorities do not react at all or in cases of a return without action or if otherwise the absence of a required authorization or provisions of any regulations inhibit a delivery in time.

6 Main Performance

The performance figures shown hereafter are guaranteed minimum performance data (minimum specification engine power). Only the fuel consumption, range and endurance values and figures refer to an ACH135 equipped with minimum specified new production engines.

Unless otherwise specified, the values and figures refer to a clean helicopter configuration at Sea Level (SL), in International Standard Atmosphere (ISA) and zero wind condition.

6.1 Performance Summary Tables

All Engine Operative (AEO) - Altitude, Rate of Climb

Pratt & Whitney Canada PW206B3, standard air intake

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Hover ceiling IGE (4 ft AGL), TOP[a]					
• ISA	m	4,877	4,877	4,008	1,524
	ft	16,000	16,000	13,150	5,000
• ISA + 20°C	m	4,185	4,185	3,231	1,524
	ft	13,730	13,730	10,600	5,000
Hover ceiling OGE, TOP[a]					
• ISA	m	4,877	4,557	2,195	686
	ft	16,000	14,950	7,200	2,250
• ISA +20°C	m	4,185	3,658	1,829	64
	ft	13,730	12,000	6,000	210
Service ceiling, MCP (climb reserve 200 ft/min)[a]					
• ISA	m	6,096	6,096	4,770	3,048
	ft	20,000	20,000	15,650	10,000
• ISA +20°C	m	6,096	5,151	3,962	3,048
	ft	20,000	16,900	13,000	10,000
Rate of climb, TOP, V_Y = 65 KTAS[a]	m/s	14.5	10.8	7.9	7.3
	ft/min	2,860	2,130	1,560	1,440

a. Preliminary performance data
b. Requiring FMA 11-11

All Engine Operative (AEO) - Speed, Fuel Consumption, Range

Pratt & Whitney Canada PW206B3, standard air intake

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Maximum speed (V_{NE})[a], as TAS	km/h kts	277 150	277 150	259 140	240 130
Fast cruise speed (V_H)[a], as TAS	km/h kts	265 143	259 140	252 136	240 130
Fuel consumption at fast cruise speed[a]	kg/h lb/h	229 505	229 505	229 505	222 489
Recommended cruise speed[ac], as TAS	km/h kts	248 134	256 138	250 135	241 130
Best range speed (V_{BR})[a], at TAS	km/h kts	241 130	243 131	246 133	241 130
Fuel consumption at best range speed[a]	kg/h lb/h	201 443	209 461	223 492	222 489
Fuel consumption at 65 KTAS[a]	kg/h lb/h	139 306	150 331	163 359	166 366
Maximum range at best range speed (no reserve)[a]					
• Standard fuel tank (560.4 kg)	km NM	678 366	659 356	633 342	624 337
• Standard and long range fuel tank (730.6 kg)	km NM	885 478	865 467	832 449	822 444
Maximum endurance at 65 KTAS (no reserve)[a]					
• Standard fuel tank (560.4 kg)	h:min	4:10	3:54	3:36	3:31
• Standard and long range fuel tank (730.6 kg)	h:min	5:24	5:09	4:46	4:41

a. Preliminary performance data
b. Requiring FMA 11-11
c. The recommended cruise speed is the speed at which the achievable range is 99% of the best range.

All Engine Operative (AEO) - Speed, Fuel Consumption, Range at 5,000 ft

Pratt & Whitney Canada PW206B3, standard air intake

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Fast cruise speed (V_H)[a] as TAS	km/h kts	274 148	269 145	254 137	248 134
Fuel consumption at fast cruise speed[a]	kg/h lb/h	219 483	219 483	219 483	219 483
Recommended cruise speed[ac], as TAS	km/h kts	246 133	254 137	252 136	246 133
Best range speed (V_{BR})[a], as TAS	km/h kts	237 128	239 129	241 130	243 131
Fuel consumption at best range speed[a]	kg/h lb/h	176 388	188 414	205 452	213 470
Fuel consumption at 70 KTAS[a]	kg/h lb/h	125 276	137 302	153 337	157 346
Maximum range at best range speed (no reserve)[a]					
• Standard fuel tank (560.4 kg)	km NM	769 415	735 397	691 373	678 366
• Standard and long range fuel tank (730.6 kg)	km NM	1,007 544	967 522	913 493	896 484
Maximum endurance at 70 KTAS (no reserve)[a]					
• Standard fuel tank (560.4 kg)	h:min	4:38	4:17	3:54	3:49
• Standard and long range fuel tank (730.6 kg)	h:min	6:07	5:40	5:10	5:03

a. Preliminary performance data
b. Requiring FMA 11-11
c. The recommended cruise speed is the speed at which the achievable range is 99% of the best range.

One Engine Inoperative (OEI) - Altitude, Rate of Climb

Pratt & Whitney Canada PW206B3, standard air intake

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Service ceiling, MCP (climb reserve 100 ft/min)[a]					
• ISA	m ft	5,898 19,350	4,526 14,850	3,200 10,500	2,179 7,150
• ISA +20°C	m ft	5,395 17,700	3,810 12,500	2,195 7,200	1,554 5,100
• Rate of climb, MCP, V_Y = 65 KTAS[a]	m/s ft/min	6.2 1,230	3.8 740	1.8 350	1.3 260

a. Preliminary performance data
b. Requiring FMA 11-11

One Engine Inoperative (OEI) - Maximum Gross Mass

Pratt & Whitney Canada PW206B3, standard air intake

		ISA	ISA +20°C
Hover OGE, 30 s power[a]	kg	2,725	2,660
	lb	6,008	5,864
Hover OGE, 2 min power[a]	kg	2,710	2,555
	lb	5,975	5,633
Hover OGE, 2 min power, 10 kts headwind[a]	kg	2,755	2,600
	lb	6,074	5,732
Hover IGE (4 ft AGL), 2 min power[a]	kg	2,965	2,810
	lb	6,537	6,195
Category A - VTOL, surface level and elevated[a]			
• Baseline aircraft	kg	2,980	2,920
	lb	6,570	6,438
• Alternate gross weight[b]	kg	3,030	2,920
	lb	6,680	6,437
Category A, clear heliport[a]			
• Baseline aircraft	kg	2,980	2,980
	lb	6,570	6,570
• Alternate gross weight[b]	kg	3,100	3,100
	lb	6,834	6,834

a. Preliminary performance data.
b. Requiring FMA 11-11

All Engine Operative (AEO) - Altitude, Rate of Climb

Pratt & Whitney Canada PW206B3, Inlet Barrier Filter (IBF)

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Hover ceiling IGE (4 ft AGL), TOP[a]					
• ISA	m	4,877	4,877	3,749	1,524
	ft	16,000	16,000	12,300	5,000
• ISA + 20°C	m	4,185	4,185	2,835	1,524
	ft	13,730	13,730	9,300	5,000
Hover ceiling OGE, TOP[a]					
• ISA	m	4,877	4,557	2,195	686
	ft	16,000	14,950	7,200	2,250
• ISA +20°C	m	4,185	3,658	1,829	64
	ft	13,730	12,000	6,000	210
Service ceiling, MCP (climb reserve 200 ft/min)[a]					
• ISA	m	6,096	5,852	4,679	3,048
	ft	20,000	19,200	15,350	10,000
• ISA +20°C	m	6,096	5,090	3,780	3,048
	ft	20,000	16,700	12,400	10,000
Rate of climb, TOP, V_Y = 65 KTAS[a]	m/s	14.5	10.8	7.9	7.0
	ft/min	2,860	2,130	1,560	1,440

a. Preliminary performance data
b. Requiring FMA 11-11

All Engine Operative (AEO) - Speed, Fuel Consumption, Range

Pratt & Whitney Canada PW206B3, Inlet Barrier Filter (IBF)

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Maximum speed (V_{NE})[a], as TAS	km/h kts	277 150	277 150	259 140	240 130
Fast cruise speed (V_H)[a], as TAS	km/h kts	265 143	259 140	252 136	241 130
Fuel consumption at fast cruise speed[a]	kg/h lb/h	231 509	231 509	231 509	224 494
Recommended cruise speed[ac], as TAS	km/h kts	248 134	256 138	250 135	241 130
Best range speed (V_{BR})[a], as TAS	km/h kts	241 130	243 131	244 132	241 130
Fuel consumption at best range speed[a]	kg/h lb/h	201 443	211 465	225 496	224 494
Fuel consumption at 65 KTAS[a]	kg/h lb/h	141 311	152 335	166 366	168 370
Maximum range at best range speed (no reserve)[a]					
• Standard fuel tank (560.4 kg)	km NM	667 360	652 352	626 338	619 334
• Standard and long range fuel tank (730.6 kg)	km NM	870 470	856 462	824 445	815 440
Maximum endurance at 65 KTAS (no reserve)[a]					
• Standard fuel tank (560.4 kg)	h:min	4:05	3:50	3:34	3:30
• Standard and long range fuel tank (730.6 kg)	h:min	5:15	5;00	4:43	4:37

a. Preliminary performance data
b. Requiring FMA 11-11
c. The recommended cruise speed is the speed at which the achievable range is 99% of the best range.

All Engine Operative (AEO) - Speed, Fuel Consumption, Range at 5,000 ft

Pratt & Whitney Canada PW206B3, Inlet Barrier Filter (IBF)

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Fast cruise speed (V_H), as TAS[a]	km/h kts	274 148	269 145	254 137	248 134
Fuel consumption at fast cruise speed[a]	kg/h lb/h	221 487	221 487	221 487	221 487
Recommended cruise speed[ac], as TAS	km/h kts	246 133	254 137	252 136	246 133
Best range speed (V_{BR})[a], as TAS	km/h kts	237 128	239 129	241 130	243 131
Fuel consumption at best range speed[a]	kg/h lb/h	178 392	190 419	207 456	217 478
Fuel consumption at 70 KTAS[a]	kg/h lb/h	127 280	140 309	154 340	159 351
Maximum range at best range speed (no reserve)[a]					
• Standard fuel tank (560.4 kg)	km NM	763 412	730 394	685 370	672 363
• Standard and long range fuel tank (730.6 kg)	km NM	998 539	959 518	904 488	889 480
Maximum endurance at 70 KTAS (no reserve)[a]					
• Standard fuel tank (560.4 kg)	h:min	4:35	4:14	3:52	3:46
• Standard and long range fuel tank (730.6 kg)	h:min	6:03	5:36	5:07	5:00

a. Preliminary performance data
b. Requiring FMA 11-11
c. The recommended cruise speed is the speed at which the achievable range is 99% of the best range.

One Engine Inoperative (OEI) - Altitude, Rate of Climb

Pratt & Whitney Canada PW206B3, Inlet Barrier Filter (IBF)

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Service ceiling, MCP (climb reserve 100 ft/min)[a]					
• ISA	m ft	5,822 19,100	4,420 14,500	2,957 9,700	2,179 7,150
• ISA +20°C	m ft	5,151 16,900	3,612 11,850	1,737 5,700	1,326 4,350
• Rate of climb, MCP, V_Y = 65 KTAS[a]	m/s ft/min	6.2 1,230	3.8 740	1.8 350	1.3 260

a. Preliminary performance data
b. Requiring FMA 11-11

One Engine Inoperative (OEI) - Maximum Gross Mass

Pratt & Whitney Canada PW206B3, Inlet Barrier Filter (IBF)

		ISA	ISA +20°C
Hover OGE, 30 s power[a]	kg	2,725	2,660
	lb	6,008	5,864
Hover OGE, 2 min power[a]	kg	2,710	2,450
	lb	5,975	5,401
Hover OGE, 2 min power, 10 kts headwind[a]	kg	2,755	2,495
	lb	6,074	5,501
Hover IGE (4 ft AGL), 2 min power[a]	kg	2,965	2,700
	lb	6,537	5.952
Category A - VTOL, surface level and elevated[a]			
• Baseline aircraft	kg	2,980	2,920
	lb	6,570	6,437
• Alternate gross weight[b]	kg	3,030	2,920
	lb	6,680	6,437
Category A, clear heliport[a]			
• Baseline aircraft	kg	2,980	2,980
	lb	6,570	6,570
• Alternate gross weight[b]	kg	3,100	3,100
	lb	6,834	6,834

a. Preliminary performance data.
b. Requiring FMA 11-11

All Engine Operative (AEO) - Altitude, Rate of Climb

Safran Helicopter Engines Arrius 2B2^{plus}, standard air intake

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Hover ceiling IGE (4 ft AGL), TOP					
• ISA	m	4,877	4,877	4,023	1,524
	ft	16,000	16,000	13,200	5,000
• ISA + 20°C	m	4,185	4,185	3,063	1,524
	ft	13,730	13,730	10,050	5,000
Hover ceiling OGE, TOP					
• ISA	m	4,877	4,877	2,195	686
	ft	16,000	16,000	7,200	2,250
• ISA +20°C	m	4,185	3,834	1,890	64
	ft	13,730	12,580	6,200	210
Service ceiling, MCP (climb reserve 200 ft/min)					
• ISA	m	6,096	6,096	4,983	3,048
	ft	20,000	20,000	16,350	10,000
• ISA +20°C	m	6,096	5,425	4,145	3,048
	ft	20,000	17,800	13,600	10,000
Rate of climb, TOP, V_Y = 65 KTAS	m/s	14.5	10.8	7.9	7.3
	ft/min	2,860	2,130	1,560	1,440

a. Preliminary performance data
b. Requiring FMA 11-11

All Engine Operative (AEO) - Speed, Fuel Consumption, Range

Safran Helicopter Engines Arrius 2B2^{plus}, standard air intake

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Maximum speed (V_{NE}), as TAS	km/h kts	277 150	277 150	259 140	240 130
Fast cruise speed (V_H), as TAS	km/h kts	265 143	259 140	252 136	240 130
Fuel consumption at fast cruise speed	kg/h lb/h	230 507	230 507	230 507	225 496
Recommended cruise speed[c], as TAS	km/h kts	257 139	259 140	250 135	241 130
Best range speed (V_{BR}), as TAS	km/h kts	246 133	248 134	250 135	240 130
Fuel consumption at best range speed	kg/h lb/h	210 463	217 478	228 503	225 496
Fuel consumption at 65 KTAS	kg/h lb/h	149 328	160 353	172 379	175 386
Maximum range at best range speed (no reserve)					
• Standard fuel tank (560.4 kg)	km NM	648 350	635 343	615 332	607 328
• Standard and long range fuel tank (730.6 kg)	km NM	846 457	833 450	809 437	800 432
Maximum endurance at 65 KTAS (no reserve)					
• Standard fuel tank (560.4 kg)	h:min	3:47	3:35	3:20	3:17
• Standard and long range fuel tank (730.6 kg)	h:min	4:57	4:41	4:26	4:20

a. Preliminary performance data
b. Requiring FMA 11-11
c. The recommended cruise speed is the speed at which the achievable range is 99% of the best range.

All Engine Operative (AEO) - Speed, Fuel Consumption, Range at 5,000 ft

Safran Helicopter Engines Arrius 2B2^{plus}, standard air intake

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Fast cruise speed (V_H), as TAS	km/h kts	274 148	269 145	254 137	248 134
Fuel consumption at fast cruise speed	kg/h lb/h	226 498	226 498	226 498	226 498
Recommended cruise speed[c], as TAS	km/h kts	259 140	261 141	252 136	246 133
Best range speed (V_{BR}), as TAS	km/h kts	252 136	250 135	248 134	246 133
Fuel consumption at best range speed	kg/h lb/h	186 410	195 430	204 450	208 459
Fuel consumption at 70 KTAS	kg/h lb/h	132 291	143 315	155 342	160 353
Maximum range at best range speed (no reserve)					
• Standard fuel tank (560.4 kg)	km NM	765 413	745 402	709 383	696 376
• Standard and long range fuel tank (730.6 kg)	km NM	1,004 542	976 527	933 504	919 496
Maximum endurance at 70 KTAS (no reserve)					
• Standard fuel tank (560.4 kg)	h:min	4:23	4:06	3:48	3:43
• Standard and long range fuel tank (730.6 kg)	h:min	5:45	5:25	5:02	4:55

a. Preliminary performance data
b. Requiring FMA 11-11
c. The recommended cruise speed is the speed at which the achievable range is 99% of the best range.

One Engine Inoperative (OEI) - Altitude, Rate of Climb

Safran Helicopter Engines Arrius 2B2^{plus}, standard air intake

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Service ceiling, MCP (climb reserve 100 ft/min)					
• ISA	m ft	5,989 19,650	4,633 15,200	3,200 10,500	2,179 7,150
• ISA +20°C	m ft	5,471 17,950	3,993 13,100	2,149 7,050	1,585 5,200
Rate of climb, MCP, V_Y = 65 KTAS	m/s ft/min	6.2 1,230	3.8 740	1.8 350	1.3 260

a. Preliminary performance data
b. Requiring FMA 11-11

One Engine Inoperative (OEI) - Maximum Gross Mass

Safran Helicopter Engines Arrius 2B2^{plus}, standard air intake

		ISA	ISA +20°C
Hover OGE, 30 s power	kg	2,725	2,665
	lb	6,008	5,875
Hover OGE, 2 min power	kg	2,710	2,545
	lb	5,975	5,611
Hover OGE, 2 min power, 10 kts headwind	kg	2,750	2,600
	lb	6,063	5,732
Hover IGE (4 ft AGL), 2 min power	kg	2,965	2,800
	lb	6,537	6,173
Category A - VTOL, surface level and elevated			
• Baseline aircraft	kg	2,980	2,950
	lb	6,570	6,504
• Alternate gross weight[ab]	kg	3,030	2,950
	lb	6,680	6,504
Category A, clear heliport			
• Baseline aircraft	kg	2,980	2,980
	lb	6,570	6,570
• Alternate gross weight[ab]	kg	3,100	3,100
	lb	6,834	6,834

a. Preliminary Performance data
b. Requiring FMA 11-11

All Engine Operative (AEO) - Altitude, Rate of Climb

Safran Helicopter Engines Arrius 2B2^{plus}, Inlet Barrier Filter (IBF)

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Hover ceiling IGE (4 ft AGL), TOP					
• ISA	m	4,877	4,877	3,886	1,524
	ft	16,000	16,000	12,750	5,000
• ISA + 20°C	m	4,185	4,185	2,713	1,524
	ft	13,730	13,730	8,900	5,000
Hover ceiling OGE, TOP					
• ISA	m	4,877	4,694	2,195	686
	ft	16,000	15,400	7,200	2,250
• ISA +20°C	m	4,185	3,658	1,829	64
	ft	13,730	12,000	6,000	210
Service ceiling, MCP (climb reserve 200 ft/min)					
• ISA	m	6,096	6,096	4,877	3,048
	ft	20,000	20,000	16,000	10,000
• ISA +20°C	m	6,096	5,243	4,054	3,048
	ft	20,000	17,200	13,300	10,000
Rate of climb, TOP, V_Y = 65 KTAS	m/s	14.5	10.8	7.9	7.3
	ft/min	2,860	2,130	1,560	1,440

a. Preliminary performance data
b. Requiring FMA 11-11

All Engine Operative (AEO) - Speed, Fuel Consumption, Range

Safran Helicopter Engines Arrius 2B2^{plus}, Inlet Barrier Filter (IBF)

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Maximum speed (V_{NE}), as TAS	km/h kts	277 150	277 150	259 140	240 130
Fast cruise speed (V_H), as TAS	km/h kts	265 143	259 140	252 136	240 130
Fuel consumption at fast cruise speed	kg/h lb/h	232 512	232 512	232 512	230 507
Recommended cruise speed[c], as TAS	km/h kts	257 139	259 140	250 135	241 130
Best range speed (V_{BR}), as TAS	km/h kts	246 133	248 134	250 135	240 130
Fuel consumption at best range speed	kg/h lb/h	211 465	220 485	230 507	230 507
Fuel consumption at 65 KTAS	kg/h lb/h	150 331	161 355	173 381	174 384
Maximum range at best range speed (no reserve)					
• Standard fuel tank (560.4 kg)	km NM	641 346	628 339	609 329	602 325
• Standard and long range fuel tank (730.6 kg)	km NM	841 454	826 446	802 433	793 428
Maximum endurance at 65 KTAS (no reserve)					
• Standard fuel tank (560.4 kg)	h:min	3:45	3:33	3:18	3:15
• Standard and long range fuel tank (730.6 kg)	h:min	4:55	4:39	4:23	4:18

a. Preliminary performance data
b. Requiring FMA 11-11
c. The recommended cruise speed is the speed at which the achievable range is 99% of the best range.

All Engine Operative (AEO) - Speed, Fuel Consumption, Range at 5,000 ft

Safran Helicopter Engines Arrius 2B2^{plus}, Inlet Barrier Filter (IBF)

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Fast cruise speed (V_H), as TAS	km/h kts	274 148	269 145	254 137	248 134
Fuel consumption at fast cruise speed	kg/h lb/h	233 514	233 514	233 514	233 514
Recommended cruise speed[c], as TAS	km/h kts	259 140	261 141	252 136	246 133
Best range speed (V_{BR}), as TAS	km/h kts	252 136	250 135	248 134	246 133
Fuel consumption at best range speed	kg/h lb/h	189 417	197 434	206 454	211 465
Fuel consumption at 70 KTAS	kg/h lb/h	134 295	145 320	157 346	162 357
Maximum range at best range speed (no reserve)					
• Standard fuel tank (560.4 kg)	km NM	759 410	737 398	702 379	689 372
• Standard and long range fuel tank (730.6 kg)	km NM	995 537	967 522	924 499	909 491
Maximum endurance at 70 KTAS (no reserve)					
• Standard fuel tank (560.4 kg)	h:min	4:21	4:04	3:46	3:41
• Standard and long range fuel tank (730.6 kg)	h:min	5:43	5:22	4:59	4:52

a. Preliminary performance data
b. Requiring FMA 11-11
c. The recommended cruise speed is the speed at which the achievable range is 99% of the best range.

One Engine Inoperative (OEI) - Altitude, Rate of Climb

Safran Helicopter Engines Arrius 2B2^{plus}, Inlet Barrier Filter (IBF)

	kg lb	2,000 4,409	2,500 5,512	2,980 6,570	3,100[ab] 6,834[ab]
Service ceiling, MCP (climb reserve 100 ft/min)					
• ISA	m ft	5,989 19,650	4,633 15,200	3,200 10,500	2,179 7,150
• ISA +20°C	m ft	5,471 17,950	3,993 13,100	2,149 7,050	1,585 5,200
Rate of climb, MCP, V_Y = 65 KTAS	m/s ft/min	6.2 1,230	3.8 740	1.8 350	1.3 260

a. Preliminary performance data
b. Requiring FMA 11-11

One Engine Inoperative (OEI) - Maximum Gross Mass

Safran Helicopter Engines Arrius 2B2^{plus}, Inlet Barrier Filter (IBF)

		ISA	ISA +20°C
Hover OGE, 30 s power	kg	2,725	2,665
	lb	6,008	5,875
Hover OGE, 2 min power	kg	2,710	2,505
	lb	5,975	5,523
Hover OGE, 2 min power, 10 kts headwind	kg	2,750	2,550
	lb	6,063	5,622
Hover IGE (4 ft AGL), 2 min power	kg	2,965	2,750
	lb	6,537	6,063
Category A - VTOL, surface level and elevated			
• Baseline aircraft	kg	2,980	2,950
	lb	6,570	6,504
• Alternate gross weight[ab]	kg	3,030	2,950
	lb	6,680	6,504
Category A, clear heliport			
• Baseline aircraft	kg	2,980	2,980
	lb	6,570	6,570
• Alternate gross weight[ab]	kg	3,100	3,100
	lb	6,834	6,834

a. Preliminary Performance data
b. Requiring FMA 11-11

6.2 Operating Limitations

• Maximum operating altitude	6,096 m PA 20,000 ft PA
• Maximum altitude for hover takeoff and landing	4,877 m DA or PA 16,000 ft DA or PA Whichever is less
• Minimum air temperature	-35 °C
• Maximum air temperature	ISA +39 °C (max. +50 °C)
• Category A - Maximum takeoff and landing altitude for Clear Heliport operations	3,658 m DA or PA 12,000 ft DA or PA Whichever is less
• Category A - Maximum takeoff and landing altitude for Vertical Takeoff and Landing (VTOL)	2,743 m DA or PA 9,000 ft DA or PA Whichever is less

Operating limitations for gross mass above 2,980 kg (6,570 lb)[1]

• Maximum operating altitude:	3,048 m PA 10,000 ft PA
• Maximum altitude for hover, takeoff, landing, Category A takeoff, Category A landing	1,524 m DA or PA 5,000 ft DA or PA Whichever is less
• Minimum air temperature	-35 °C
• Maximum air temperature	ISA +20 °C (max. +35 °C)

1. Requiring FMA 11-11

6.3 Performance Charts

6.3-1 Hover In Ground Effect (HIGE, TOP) with two Pratt & Whitney Canada PW206B3

Standard air intake

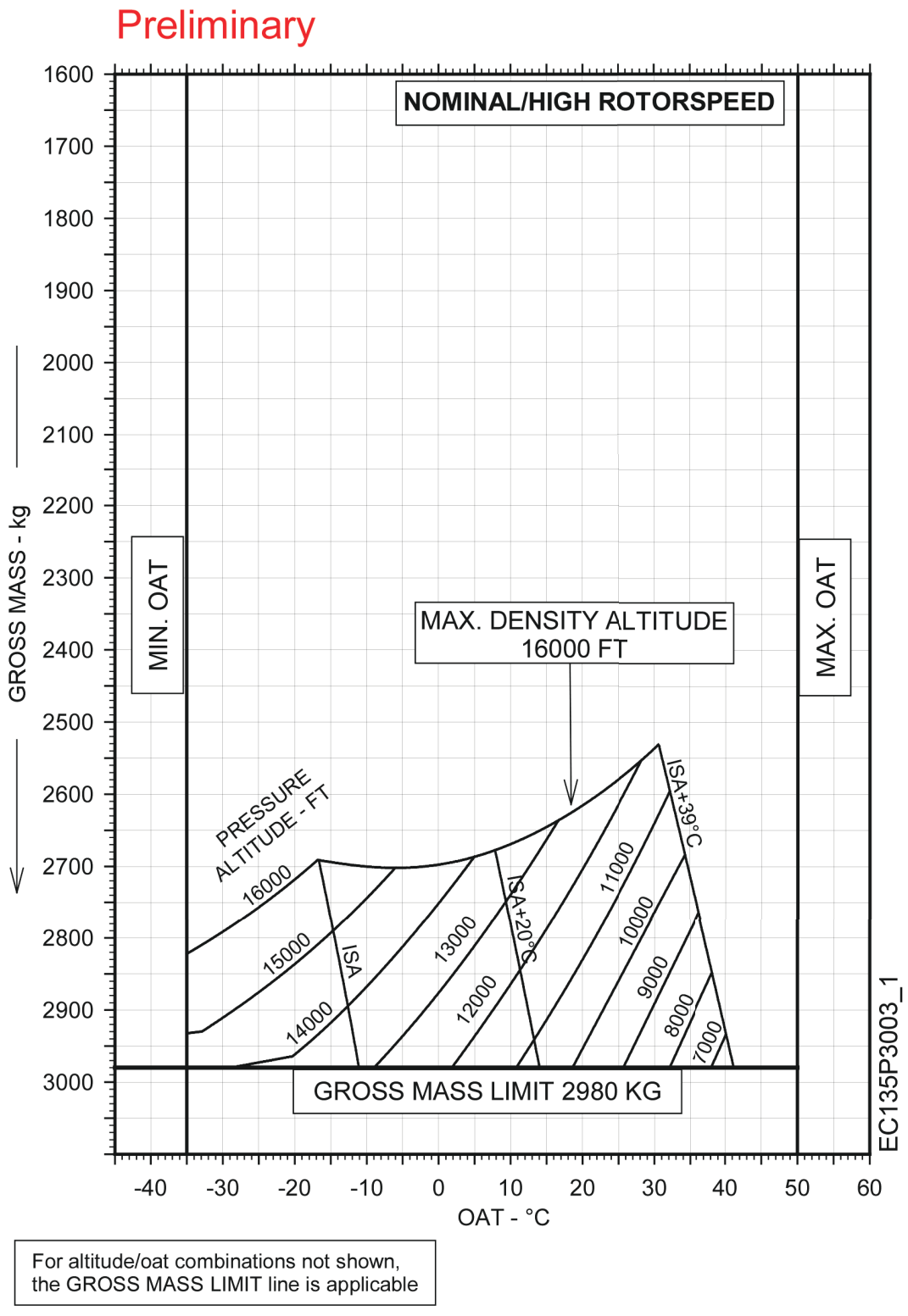


Figure 6.1: Hover in Ground Effect (HIGE, TOP) with two Pratt & Whitney Canada PW206B3, standard air intake

6.3-2 Hover In Ground Effect (HIGE, TOP) with two Pratt & Whitney Canada PW206B3

Inlet Barrier Filter (IBF), clogged filter / bypass closed

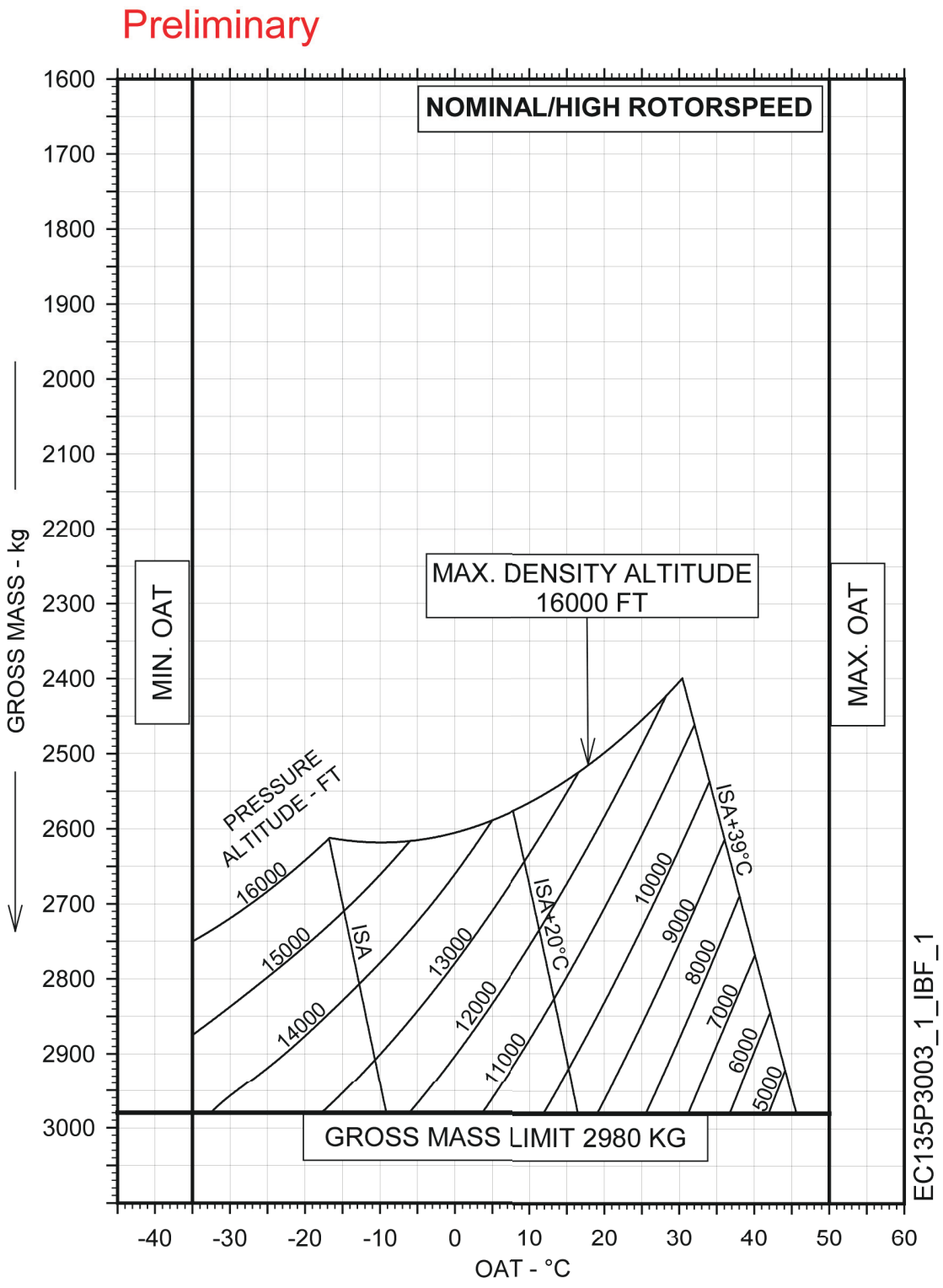


Figure 6.2: Hover In Ground Effect (HIGE, TOP) with two Pratt & Whitney Canada PW206B3, IBF

6.3-3 Hover Out of Ground Effect (HOGE, TOP) with two Pratt & Whitney Canada PW206B3

Standard air intake

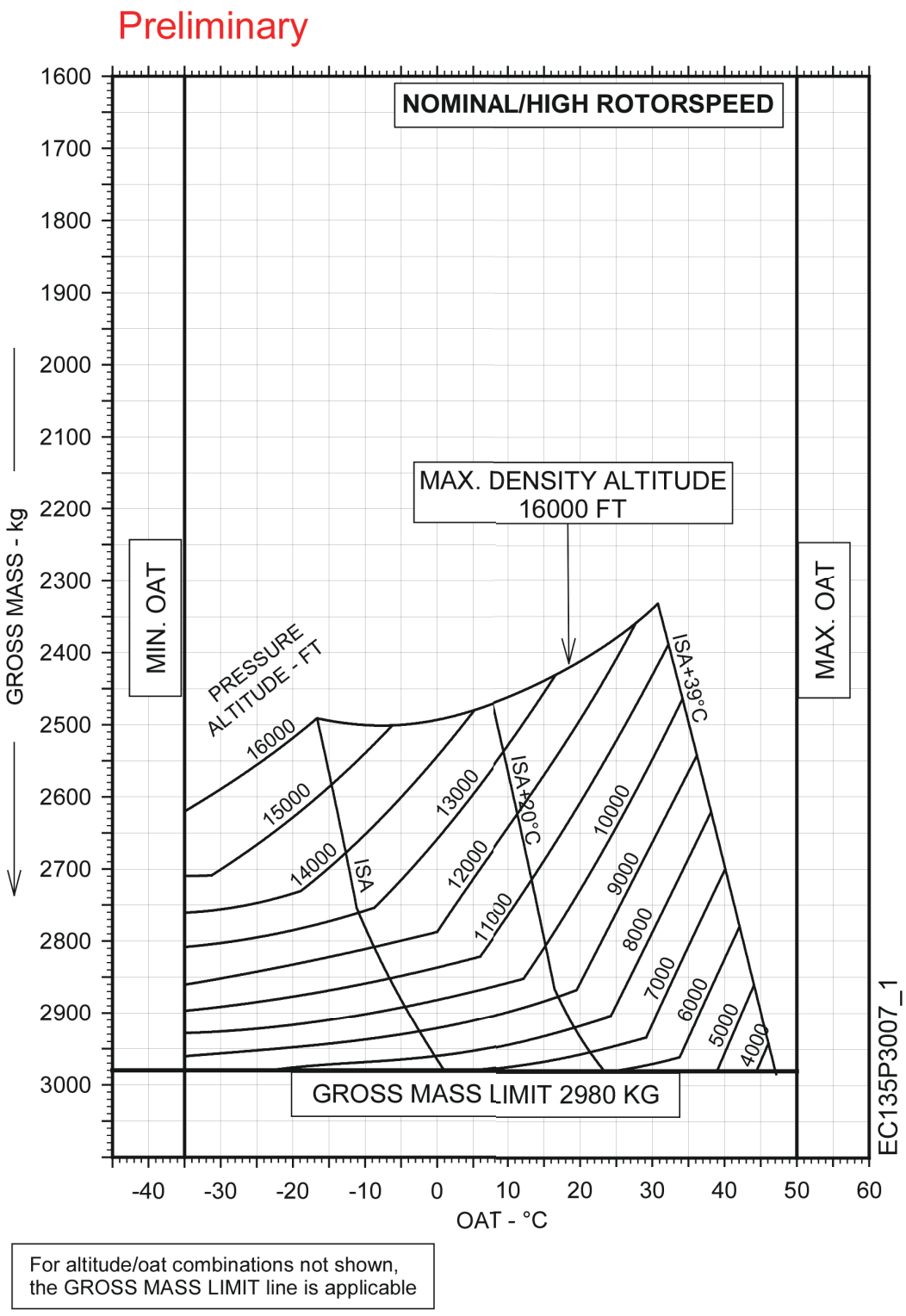


Figure 6.3: Hover Out of Ground Effect (HOGE, TOP) with two Pratt & Whitney Canada PW206B3, standard air intake

6.3-4 Hover Out of Ground Effect (HOGE, TOP) with two Pratt & Whitney Canada PW206B3

Inlet Barrier Filter (IBF), clogged filter / bypass closed

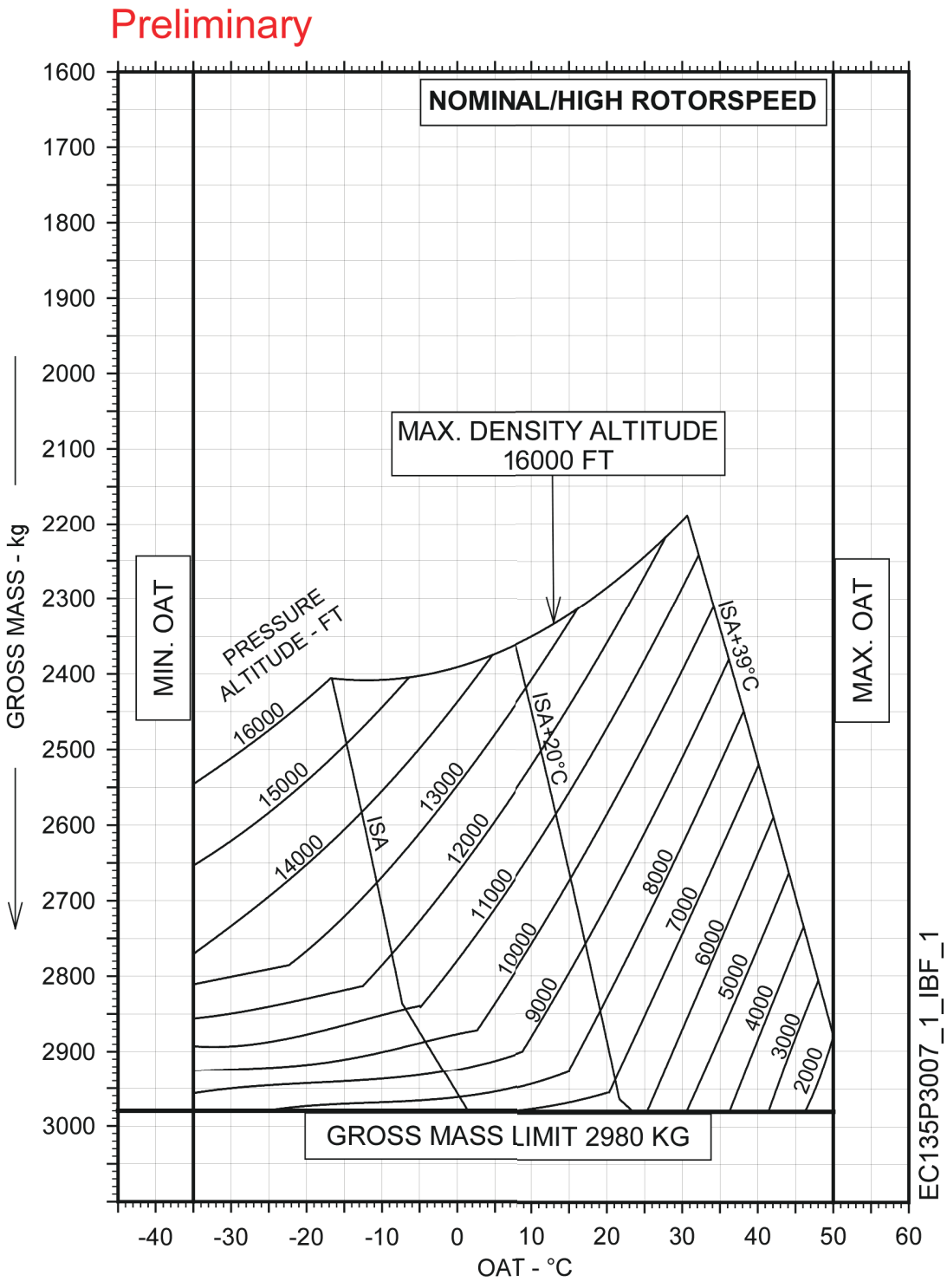


Figure 6.4: Hover Out of Ground Effect (HOGE, TOP) with two Pratt & Whitney Canada PW206B3, IBF

6.3-5 Fuel consumption with two Pratt & Whitney Canada PW206B3

Inlet Barrier Filter (IBF), bleed air heating off

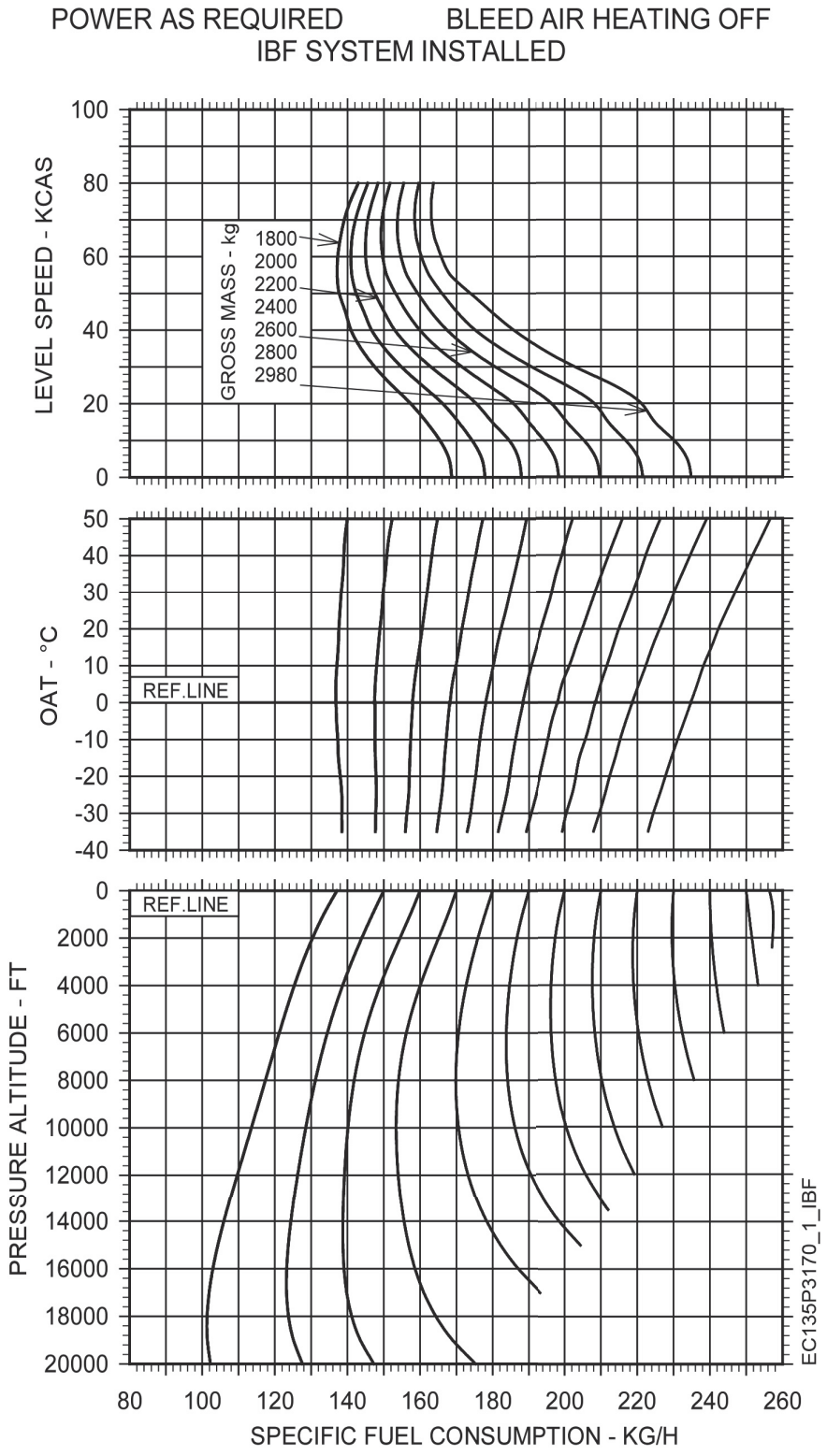


Figure 6.5: Fuel consumption with two Pratt & Whitney Canada PW206B3, 0 - 80 KCAS, IBF

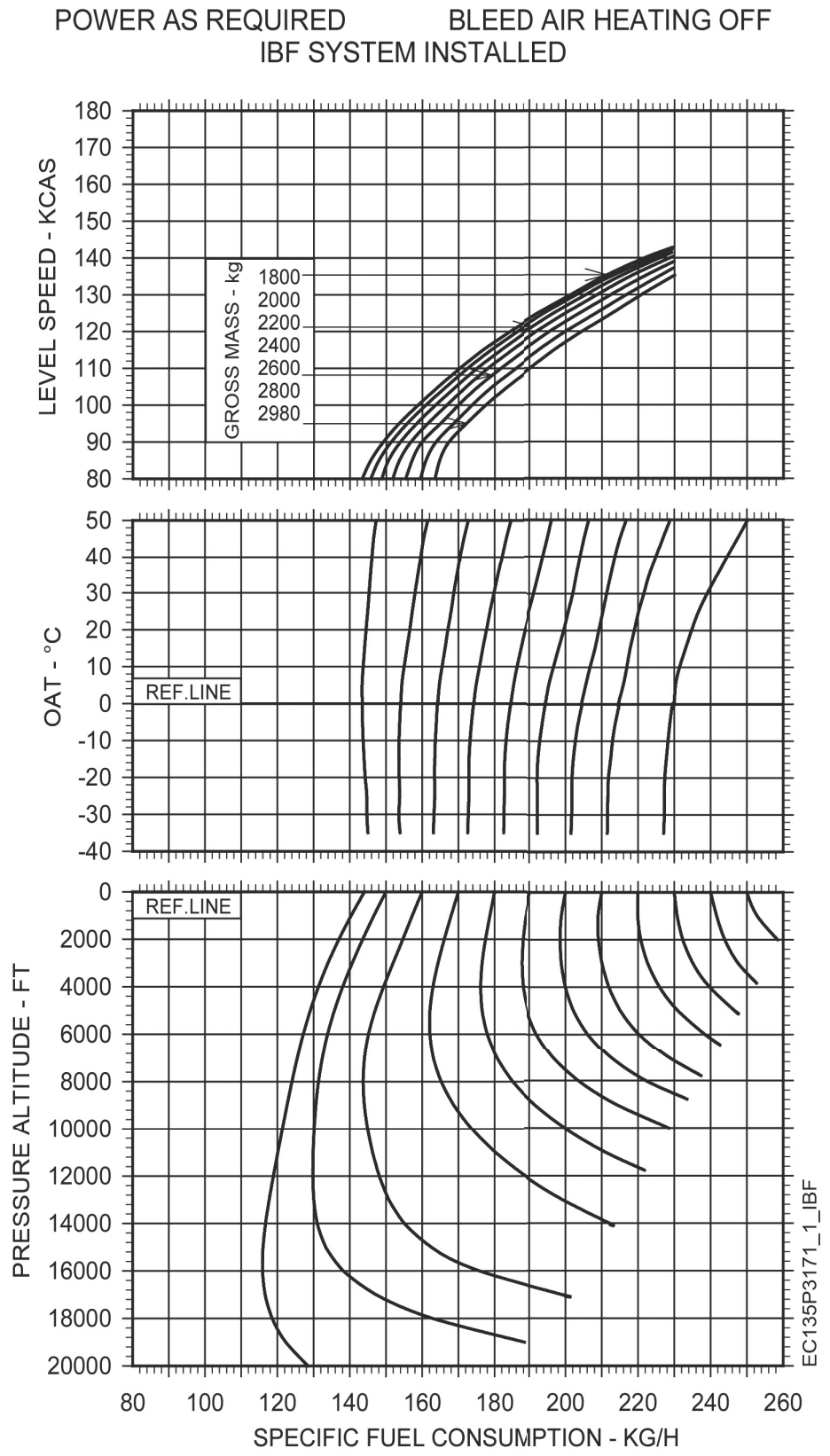


Figure 6.6: Fuel consumption with two Pratt & Whitney Canada PW206B3, 80 KCAS - V_H, IBF

6.3-6 Hover In Ground Effect (HIGE, TOP) with two Safran Helicopter Engines Arrius 2B2^{plus}

Standard air Intake

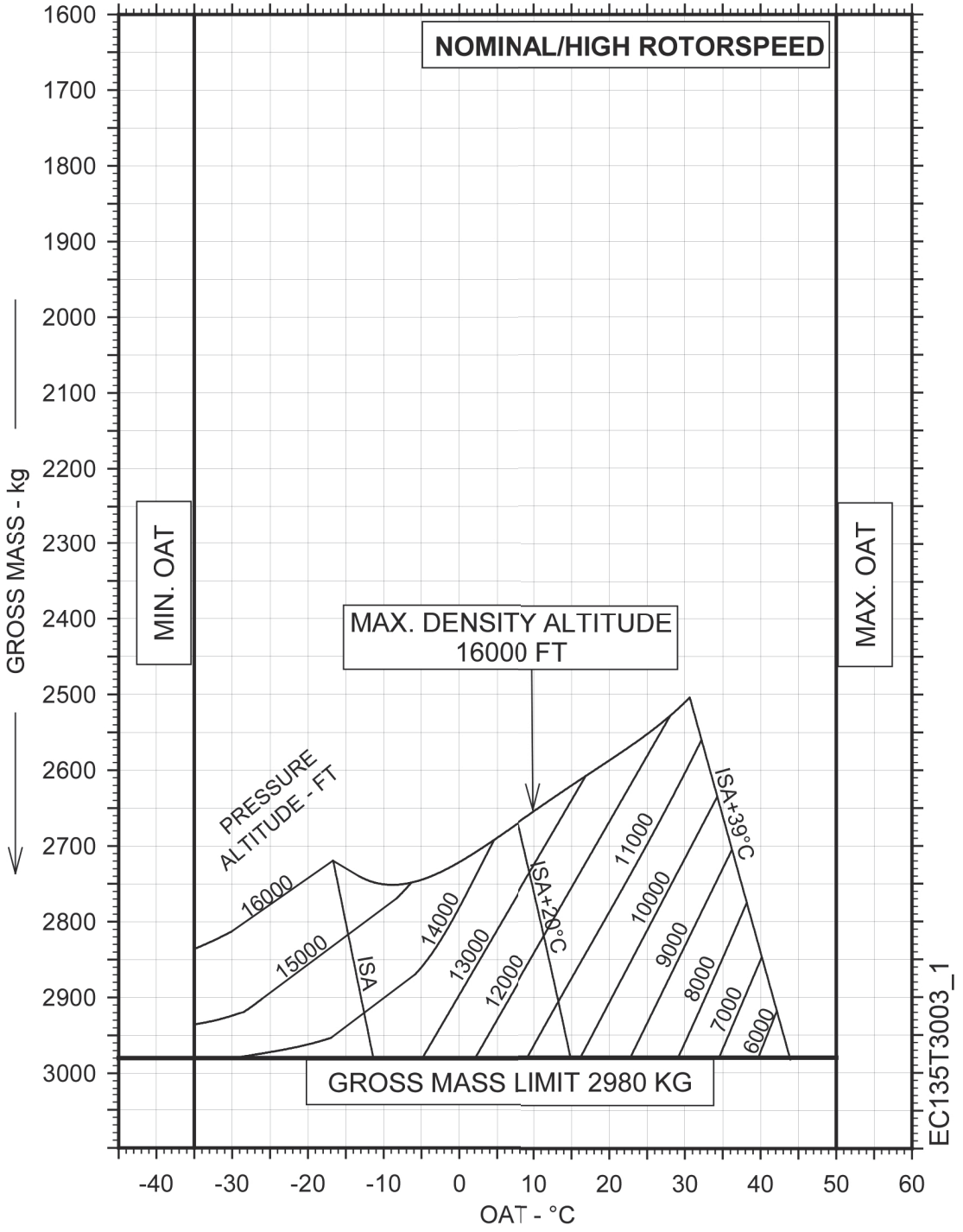


Figure 6.7: Hover in Ground Effect (HIGE, TOP) with two Safran Helicopter Engines ARRIUS 2B2^{plus}, standard air intake

6.3-7 Hover In Ground Effect (HIGE, TOP) with two Safran Helicopter Engines Arrius 2B2^{plus}

Inlet Barrier Filter (IBF), clogged filter / bypass closed

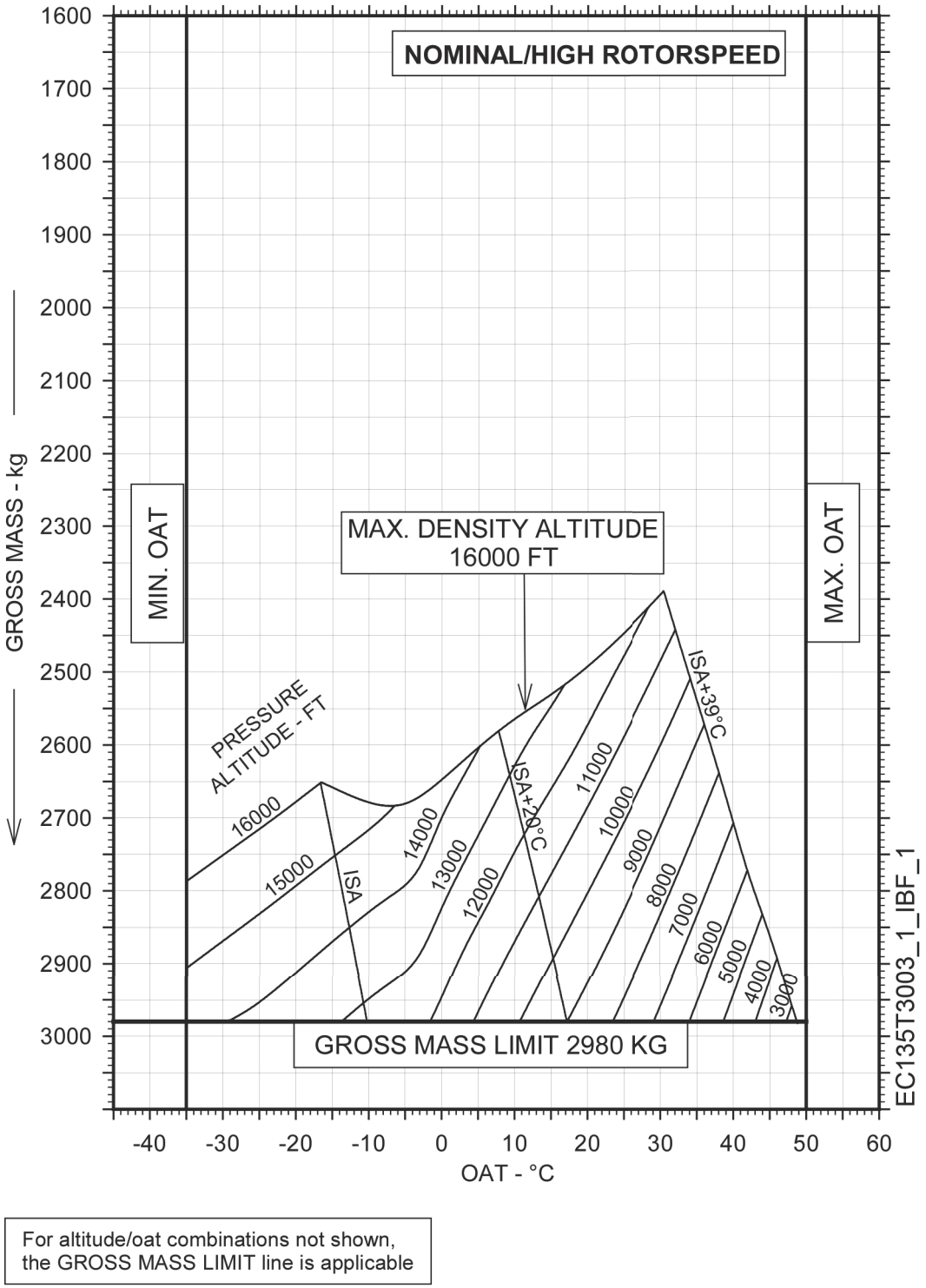


Figure 6.8: Hover in Ground Effect (HIGE, TOP) with two Safran Helicopter Engines Arrius 2B2^{plus}, IBF

6.3-8 Hover Out of Ground Effect (HOGE, TOP) with two Safran Helicopter Engines Arrius 2B2^{plus}

Standard air intake

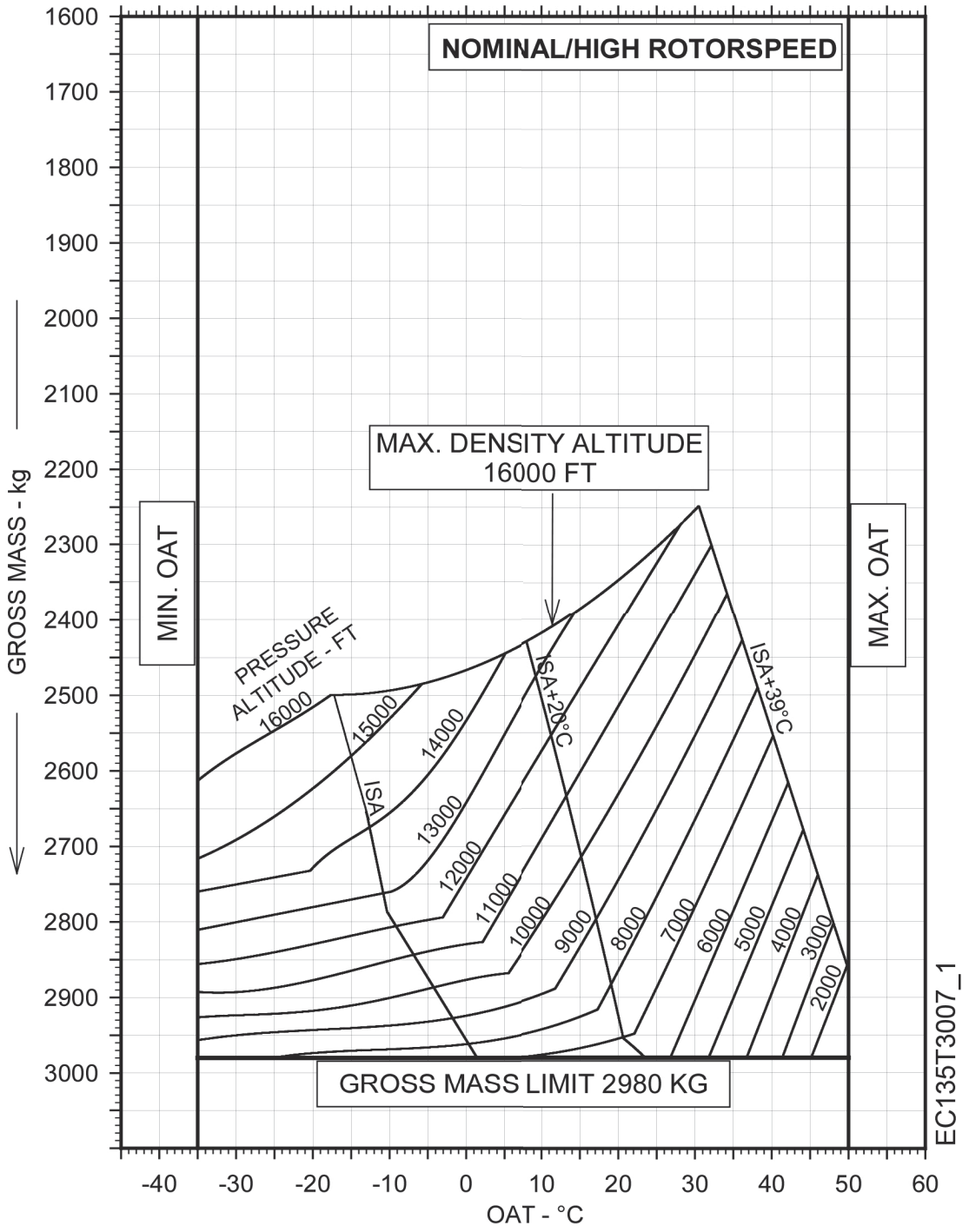


Figure 6.9: Hover Out of Ground Effect (HOGE, TOP) with two Safran Helicopter Engines Arrius 2B2^{plus}, standard air intake

6.3-9 Hover Out of Ground Effect (HOGE, TOP) with two Safran Helicopter Engines Arrius 2B2^{plus}

Inlet Barrier Filter (IBF), clogged filter / bypass closed

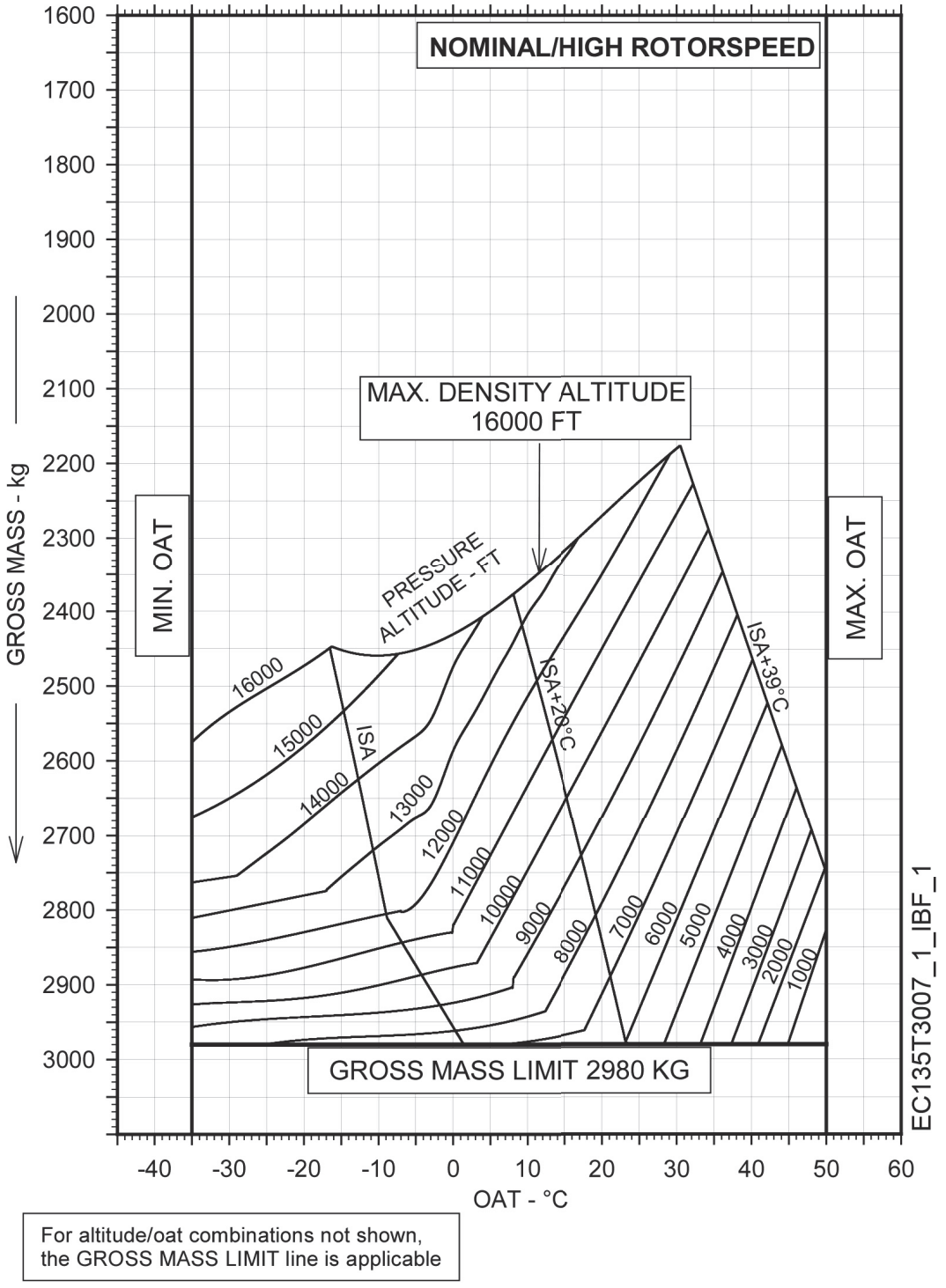


Figure 6.10: Hover Out of Ground Effect (HOGE, TOP) with two Safran Helicopter Engines Arrius 2B2^{plus}, IBF

6.3-10 Fuel consumption with two Safran Helicopter Engines Arrius 2B2^{plus}

Standard air intake, bleed air heating off

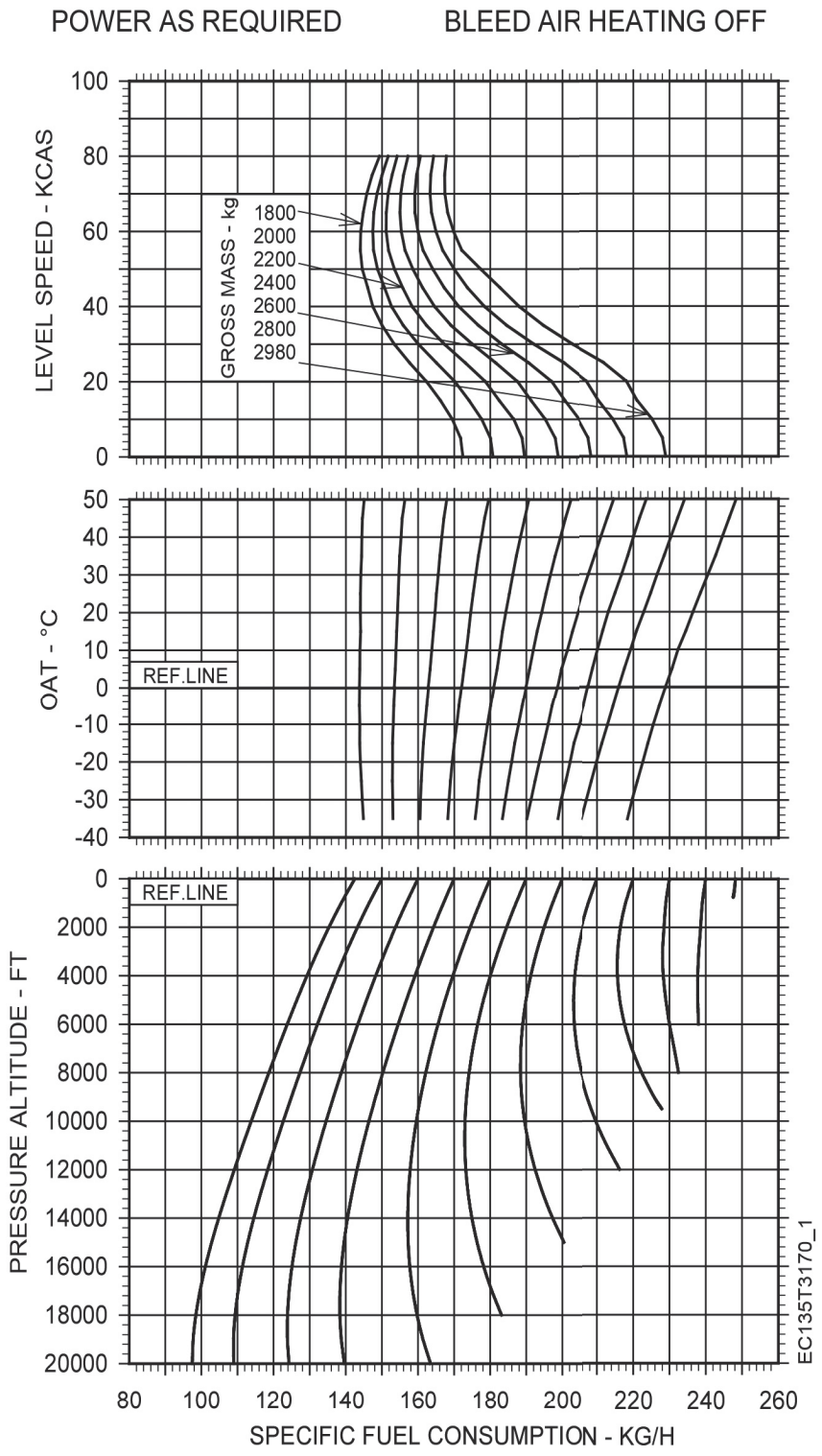


Figure 6.11: Fuel consumption with two Safran Helicopter Engines Arrius 2B2^{plus}, 0 - 80 KCAS, standard air intake

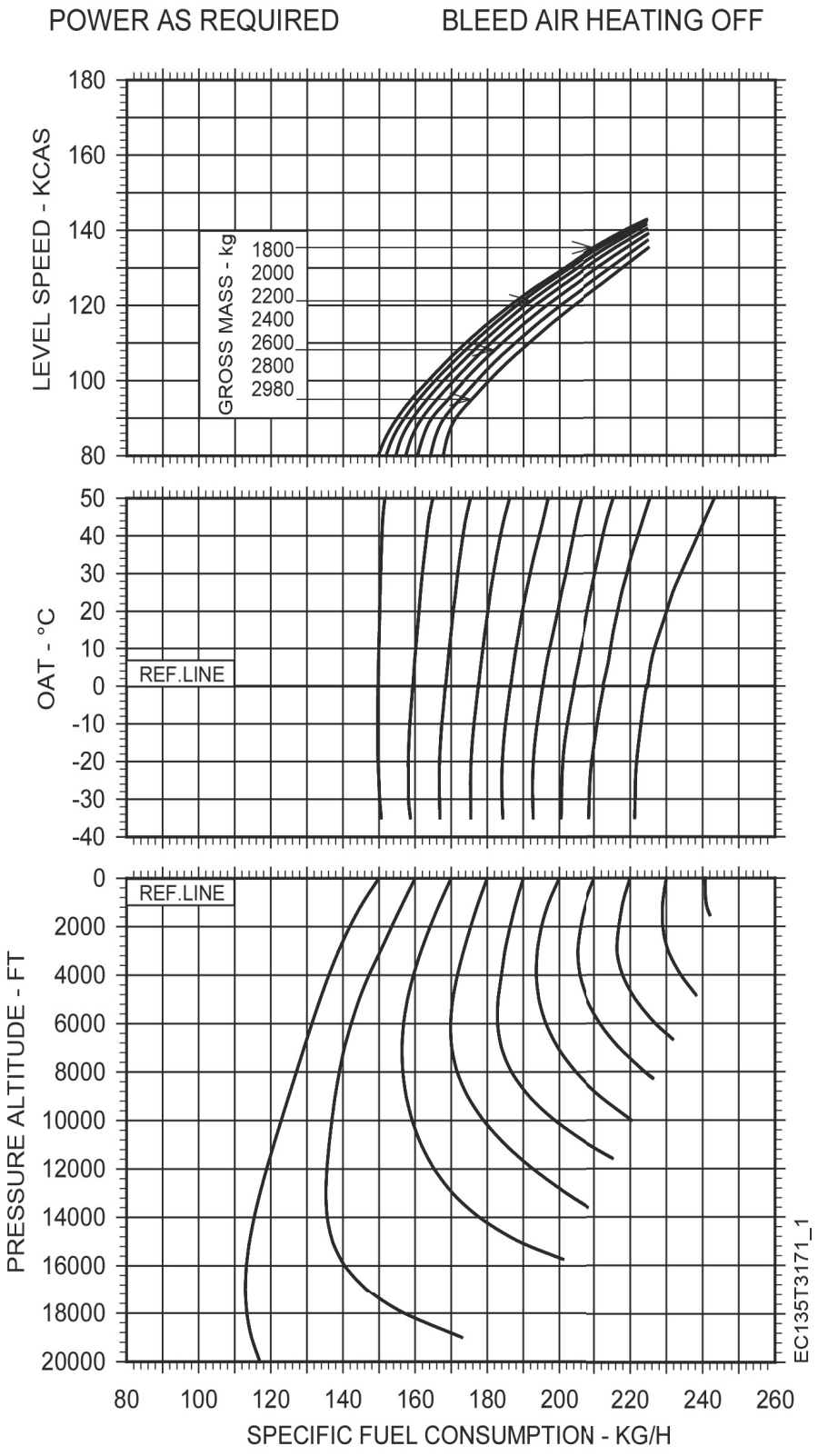


Figure 6.12: Fuel consumption with two Safran Helicopter Engines Arrius 2B2^{plus}, 80 KCAS - V_H, standard air intake

7 Services

HCare Services

Airbus Helicopters HCare services offer has been created to support our customers all along the life-cycle of their helicopters. It is aimed at supporting your business and keeping your rotorcraft in flight. Through this offer, Airbus takes full advantage of data sharing and customers' operational feedback to better understand their evolving requirements, and continuously adapts its service portfolio accordingly.

HCare First

HCare First is a tailor-made programme dedicated to Private and Business Aviation customers acquiring a new helicopter, offering a first-class service and striving for their total peace of mind.

With this solution, customers benefit from a comprehensive support service which, in addition to ensuring high availability levels anywhere in the world, will help preserve the aircraft's resale value as a result of a dedicated care and support by Airbus Helicopters.

HCare First has been carefully tailored to match customers' requirements. It accompanies operators through a worry-free period of 5 years, up to a maximum of 1,000 flight hours, and offers an extended coverage.

The programme includes scheduled (Time Between Overhaul and Service Life Limit) and unscheduled maintenance of all components & assemblies installed on the helicopter which are listed in the Illustrated Parts Catalogue (IPC). The supply of consumables, hardware and non-repairable parts can also be part of the coverage.

Any maintenance event happening on the helicopter is covered by the contract, under the form of an immediate exchange in most of the cases, delivered from one of worldwide-positioned stocks (10 logistics hubs & local inventories) or a repair when necessary.

Labour costs for unscheduled events (removal, reassembly) at standard rates for each operation, are also part of the programme, turning HCare First into a best-in-class rotorcraft service.

HCare First is globally flexible as it is supported by our worldwide multi-competency experts teams wherever you operate in the world.

Unrivalled technical expertise is put at operators' disposal to support On-the-Job-Training, troubleshooting (on-site or remote), and ensure optimal coordination with Airbus Helicopters design office and technical experts (concessions, repair solutions…).

To make its management even easier, HCare First customers' community benefits from a dedicated and reactive premium 24/7 service taking care of any logistics or technical requests the operator may have within short times using mobile app and AirbusWorld collaborative platform.

Analytics services powered by flight and maintenance data, enhance HCare First performance and ensure operators an optimal experience with their helicopter.

- Efficient scheduling of flight operations
- Optimal follow-up of fleet activity and availability
- Activity analysis for quick decision making (MTBURs[1])

All dashboards are accessible online on AirbusWorld collaborative platform.

1. Mean Time Between Unscheduled Removals

HCare First+

HCare First+ provides ACH customers an "all-inclusive" service, with a menu of add-ons that allow to go beyond the scope of HCare First.

In addition to material support, logistics management and technical services, this programme can also include airworthiness management, predictive maintenance, maintenance planning, base and line maintenance, engine support (when available), hangarage service, advanced activity analysis and more.

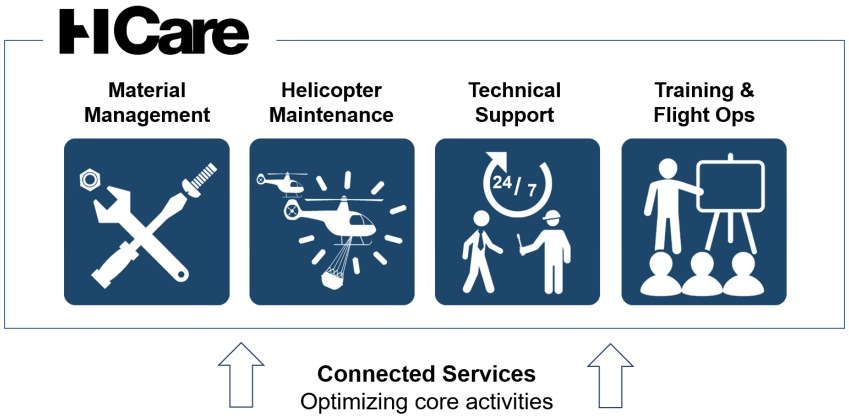
This turnkey solution can be adapted to specific requirements, enabling customers to focus on their flying experience while Airbus Helicopters takes care of the rest.

You can rely on the unique expertise of our teams to deliver the best knowledge and solutions in any situation, and wherever it is over the globe.

Proximity to your operations is key to reach the highest levels of reactivity and efficiency, that is why Airbus has implemented a worldwide organisation of 30 customer centres & participations, some 92 service centres, 10 logistics hubs & local inventories, and 4 technical support hubs spread-out in all continents.

The network is complemented by 18 training and/or simulation centres equipped with 25 simulators positioned at your doorstep, and 2 ab initio training centres.

We are committed to providing you with reliable, customer-centric HCare solutions, based on four main activities optimised by a large range of connected services:



All solutions proposed ensure that each flight is a success and is performed with the highest levels of safety.

Our HCare services are involved in a continuous improvement process, and we are confident in their efficiency to make you fly. Digital means proposed with your helicopters provide more reactivity, and mobility boosts flight and maintenance operations.

The recent digital revolution has benefitted to the way we support your helicopters, and we are able to leverage more data generated by the helicopter systems such as Flight Data Recorders and Avionics systems (Helionix), or maintenance software and applications used to manage your fleets.

This has opened the way to many improvements in the support of your rotorcraft, as maintenance events progressively become predictable, and advanced analytics make possible an optimal understanding of unavailability causes, foster a better anticipation, and improve forecasting.

Increasing our intimacy with your operations positively influences parts availability and repair & overhaul turn-around-times.

You can discover our services on our website at:
https://www.airbus.com/helicopters/services.html

or on your AirbusWorld collaborative platform, showroom section:
https://airbusworld.helicopters.airbus.com/group/guest/landing

Should you need any additional information, please contact us at:
marketing-services.helicopters@airbus.com

Engine manufacturers' support

Engine manufacturers are engaged with us in the same approach, and are committed to deliver a high level of service to our customers.

Details about their specific material management offers are available on their websites at:

Safran Helicopter Engines
https://www.safran-group.com/companies/safran-helicopter-engines

Pratt & Whitney Canada

https://www.pwc.ca/en/products-and-services/services/maintenance-programs-and-solutions/maintenance-programs/

HCare Store

7.1 Material Management

The material management services have been built to ensure smooth and efficient maintenance operations through spare part supply or component repair and overhaul, and this for any rotorcraft within Airbus Helicopters product range.

Airbus Helicopters provides a comprehensive initial provisioning package including necessary items for the support of helicopter operations (spare parts, tools & ground support equipment…) for a defined period.

- Tailored to the number of helicopters, operating bases, flight hours per year, and requested availability level.
- Adapted to the material management service type chosen by the operator.

On top of this, we propose a range of on-catalogue classical material support services procuring the right balance of components & spare parts necessary to contribute to fleet availability.

- Repair & Overhaul
- Exchange
- Spare parts

For spare parts and tools, an Ordering function is accessible through your AirbusWorld collaborative platform at: **https://airbusworld.helicopters.airbus.com/**

Recently deployed, an intuitive one-stop shop Marketplace is also available, covering a growing range of chemicals, hardware, tools and Ground Support Equipment (GSE), shop supplies directly supplied by specialised vendors in various packaging, and delivered within short times.

Aircraft On Ground (AOG) Service

Airbus Helicopters provides a 24/7 AOG service around the world, to guarantee reactive response to any urgent situation.

7.2 Helicopter Maintenance

Aircraft maintenance

A full range of services from line maintenance up to major inspections, for our entire helicopters range.

All our solutions are supported by Airbus Helicopters' design office experts, ensuring that a solution is always available, and in accordance with local authorities and international requirements (EASA, FAA).

We are capable to propose turnkey solutions that can jointly encompass mid-life upgrades or aircraft rebuilding works and Service Bulletins (SB) / Supplemental Type Certificates (STC).

Maintenance services can be performed within the Airbus Helicopters' network or at customers' premises:

- Part 145 qualified and highly skilled technicians
- Leading-edge technologies
- Committed turn-around-times (for some services)

Aircraft repair:

Solutions defined and developed by Airbus Helicopters, tailored to each aircraft configuration.

From repair and rebuilding operations up to major airframe components replacement (tail boom, frames…) performed using specific industrial means.

Full conformity and interchangeability of the repaired elements.

On-site assistance:

Operators can benefit from on-site technical assistance for:

- Helicopter maintenance
- Helicopter repair and rebuild
- Component maintenance
- Upgrades…

These solutions can be suitable when it comes to avoid aircraft transport and reducing repair times.

7.2.1 ACH135 Inspection Programs

The maintenance program specifies the intervals between maintenance operations that are recommended by Airbus Helicopters, irrespective of whether they are mandatory or not.

The program can:
- either be used as is
- or be adapted by each operator to suit his own specific organization, provided he complies with the maximum intervals (see Continuous Maintenance Program)

For the performance of scheduled and unscheduled maintenance, Airbus Helicopters has classified the maintenance tasks by the following three maintenance levels:

Organizational Level (O - Level)

This Organizational Level (O-Level) comprises tasks such as the daily servicing, pre-flight checks, visual inspections for condition, replacement of modular components and simple repairs. This work can be performed by trained helicopter mechanics with standard tools only (no special tools necessary).

Intermediate Level (I - Level)

This Intermediate Level (I-Level) comprises tasks such as smaller repairs ON / OFF helicopter, periodical inspections and replacement of modular components as well as modifications. This work can be performed by trained and experienced mechanics and may require the usage of special tools and / or test equipment.

Depot Level (D - Level)

The Depot Level (D-Level) comprises tasks such as repairs OFF helicopter, overhaul of major components and heavy airframe repair. This work can be performed by Original Equipment Manufacturer (OEM), authorized repair centers or Airbus Helicopters and requires the usage of special overhaul and repair tools, as well as test benches (if required) according to repair manuals or instructions.

The following table provides an overview of all inspections. Scheduled inspections with shorter time intervals are included in those with longer time intervals.

Scheduled airframe inspections	Maintenance level	Estimated mean man hours
Pre-flight check	O - Level	0.5
12-month inspection (max. exceedance by 3 months)	I - Level	19
Intermediate inspection every 500 Fh (max. exceedance by 50 Fh)	O - Level	26
Periodical inspection every 1,000 Fh or 3 years (max. exceedance by 100 Fh or 3 months)	I - Level	80

Note: All the "hands-on" aircraft values mentioned here above are given on the basis of a 20,000 FH life cycle. They refer only to the scheduled inspections for the standard helicopter without optional equipment in accordance with the Master Servicing Manual (MSM). The announced mean man hours are without incoming flight, work preparation, reworking, servicing, Service Bulletin (SB) implementation and unscheduled maintenance.

Continuous Maintenance Program (CMP)

As an alternative to the current maintenance program described above, Airbus provides the Continuous Maintenance Program (CMP). The CMP consists of individual work packages to be performed each within a defined time frame. A specific tolerance is effective for all work packages, which refer to the start and end time of the individual work packages. Thus, this program allows the continued flight operation without being interrupted by inspections with longer downtimes.

Engine inspection programs

The following table provides an overview of all engine inspections. Each inspection has to be performed for the respective time frame.

Note: For further details on the engine inspections and the respective D-Level maintenance please refer to the applicable engine maintenance manual.

Pratt & Whitney Canada PW206B3 periodic inspections	Maintenance level	Estimated man hours
12-month	O - Level	2
1,000 Fh	O - Level	2
900 Fh Clean and test Fuel Nozzles	O - Level	4

Safran Helicopter Engines ARRIUS 2B2^{plus} periodic inspections	Maintenance level	Estimated mean man hours
500 Fh	I - Level	2.5
1,000 Fh	I - Level	10

Note: For further details on the engine inspections and the respective D - Level maintenance please refer to the applicable maintenance manual.

7.2.2 ACH135 Main Components Limitations

Airframe main Components

Time Between Overhaul (TBO)

The component in question must be removed at each interval that corresponds to the value indicated, in order to undergo the operations in a specialized workshop that will enable it to be put back into service for the next interval. The given time limit may be exceeded by 3 % of the respective interval. All subcomponents may have a Service Life Limit (SLL), rated above the Time Between Overhaul (TBO) limit.

Airframe main components	TBO as per MSM Rev. 3 from 13.12.2021
Fuel motor pump cartridge	5,000 Fh
Longitudinal actuator	7,500 Fh
Lateral actuator	7,500 Fh
Collective actuator	7,500 Fh
Hydraulic pump	7,500 Fh
Main transmission	5,000 Fh
Tail rotor transmission	5,000 Fh
Thermal actuator of the oil cooler bypass valve	3,000 Fh

Note: Non exhaustive list.

Time Change Item (TCI) or Service Life Limit (SLL)

A Time Change Item (TCI) is a component which has an airworthiness Service Life Limit (SLL). The affected component must be removed from service when it reaches the limit indicated.

Airframe main components	TCI or SLL as per ALS Rev. 2 from 06.04.2021
Fire extinguishing system cartridge	10 years
Ring frame X5730 L535A1501 210	7,700 Fh
Ring frame X9227 L535H2120 304	18,000 Fh
Main rotor blade damper	12 years
Rotor mast hub	30,000 Fh
Tail rotor splined hub flange	20,000 Fh
Tail rotor hub	27,400 Fh
Tail rotor drive shaft long & coupling flange	20,000 Fh
Tail rotor drive rubber sleeve	5 years
Mixing lever gear unit	30,000 Fh
Collective actuator	20,000 Fh

Note: Non exhaustive list.

Engine main components

Time Between Overhaul (TBO)

The initial Time Between Overhaul (TBO) values are applicable to the engines / modules / accessories and are summarized in the tables below.

Pratt & Whitney Canada PW206B3 overhauls	TBO as per engine MM
Turbo machinery module	4,000 Fh
Reduction gearbox module	4,000 Fh

Safran Helicopter Engines ARRIUS 2B2^{plus} overhauls	TBO as per engine MM
Complete engine	4,000 Fh
Accessory & reduction gearbox module (Module 01)	4,000 Fh
Gas generator module (Module 02)	4,000 Fh
Fuel control unit	4,000 Fh

Service Life Limit (SLL)

Certain components of the engine, of which failures could cause a hazardous effect to the engine or its regulation, have service life limit expressed in cycles (reference flight cycle). The limited service life to which this term refers is the number of cycles that a critical part can run before having to be withdrawn from service.

Pratt & Whitney Canada PW206B3 components	SLL as per engine MM
Impeller	15,000 cycles
Compressor turbine disk	10,000 cycles
Power turbine disk	15,000 cycles

Note: The compressor turbine disk is commercially supported to 15,000 cycles.

Safran Helicopter Engines ARRIUS 2B2^{plus} components	SLL as per engine MM
Centrifugal impeller	20,000 cycles
High pressure turbine disk	13,000 cycles
Power turbine disk	14,000 cycles

Note: Cycles are calculated automatically by the Engine Electronic Control Unit. Average experienced rate is about 0.5 cycles/Fh.

Upgrades

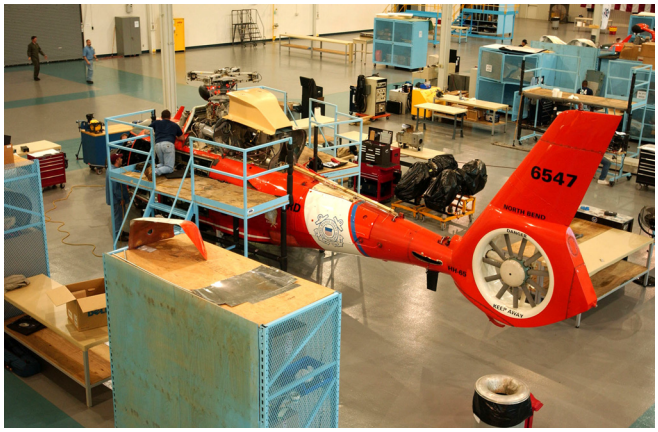
Airbus Helicopters proposes tailored services aimed at increasing your helicopter's overall performance, reducing maintenance costs, and contributing to the harmonisation of your fleet.

A wide range of conversions (e.g. EC135 T3/P3 upgrade) and mid-life upgrades (e.g. glass cockpit):

- Keep your aircraft at the latest version
- Benefit from innovations and advanced technology
- Provide new life to your aircraft
- Cover obsolescence

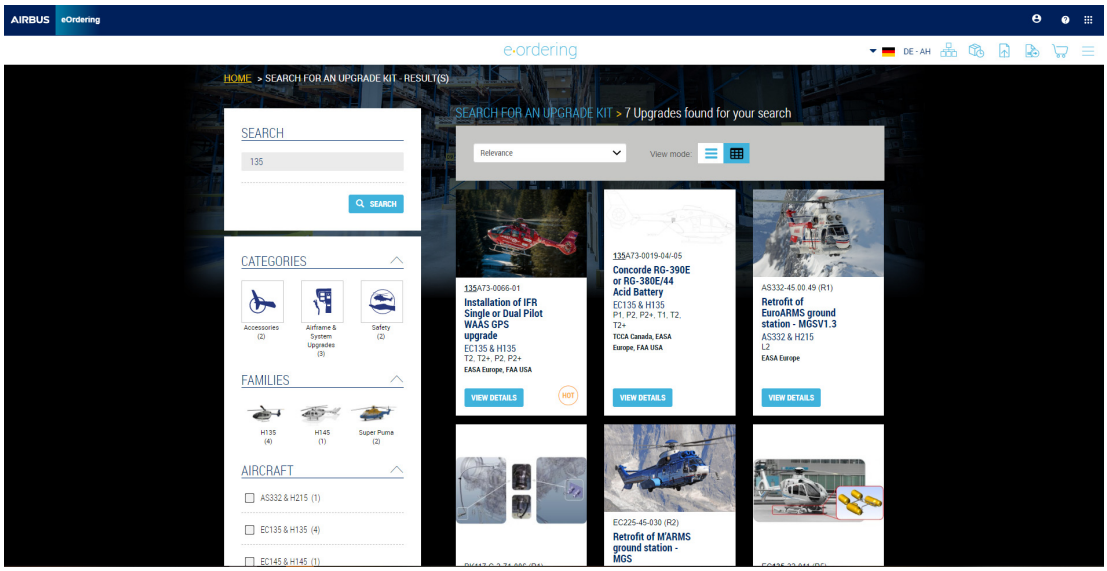
These upgrades can be very beneficial to your operations:

- Adapted to your aircraft configuration
- Defined by our experienced design office teams
- Certified and safe modifications developed by the Type Certificate holder



Airbus Helicopters also proposes a variety of off-the-shelf standard upgrades (SBs or STCs), easily accessible through your AirbusWorld collaborative platform:
https://airbusworld.helicopters.airbus.com/

- Quick procurement
- Request for quotation in a few clicks
- Catalogue of kits duly certified by main international authorities is available online



7.3 Technical Support

To allow you to get full benefit from your rotorcraft, Airbus Helicopters provides expert technical support ensuring the appropriate response to any and each technical query.

Technical expertise 24/7 and technical assistance

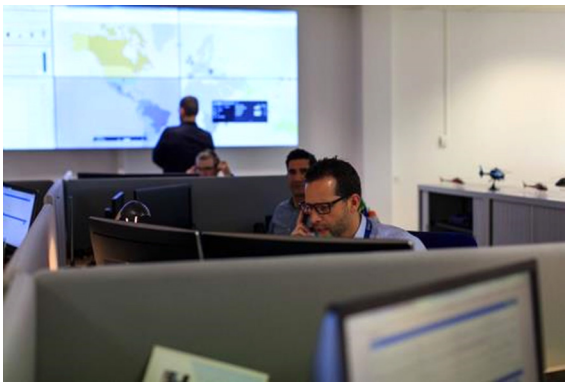
A team of highly skilled ATA experts in close and daily relation with our technical department is committed to answer any technical question you may have:

Main missions:
- Conduct complex troubleshooting
- Define technical improvements & recommendations for use
- Inform operators on technical topics (Service Bulletins, Information Notices…)
- Forward a reactive response to the operators

The workforce is strengthened by a team of Part 66 qualified technical representatives (TechRep), ready to support at operators' premises, anywhere in the world. A comprehensive technical service ranging from On-the-Job-Training, troubleshooting, up to advanced logistics services for fast and efficient problem solving.

All technical requests can be placed & tracked online via the Technical Request Management tool in your AirbusWorld collaborative platform: **https://airbusworld.helicopters.airbus.com** or on the Technical Request app.

Any request is immediately taken into account by our worldwide teams of senior ATA experts.
- Efficient daily tracking
- High reactivity



Continuing Airworthiness Management (CAM) services

Through its Continuing Airworthiness Management (CAM) offer, Airbus Helicopters provides highly effective safety and airworthiness management for helicopters operating worldwide, based on Airbus Helicopters Type Certificate sources. Airbus Helicopters monitors all configuration and airworthiness aspects of a customer's rotorcraft - enabling them to focus on operations.

CAM services can be tailored to meet customer requirements from consulting up to fully delegated CAM management, either from "as built/delivered" or "as maintained" configurations.

TechData services

Airbus provides the Instruction for Continuous Airworthiness (ICA) required to support fleet availability and to ensure safe flight operations and cost-effective maintenance.

The TechData package is composed of various manuals (non-exhaustive list of manuals and acronyms):

Operation:

- The Flight Manual (FLM)
- Master Minimum Equipment List (MMEL)
- Quick Reference Handbook (QRH)
- Ground Rescue Booklet (GRB)

Maintenance:

- Master Servicing Manual (ALS/MSM)
- Aircraft Maintenance Manual (AMM)
- System Description Section (SDS)
- Structure Repair Manual (SRM)
- Wiring Diagram Manual (WDM)
- Standard Practices Manual (MTC)
- Illustrated Parts Catalog (IPC)
- Service Bulletin collection (SB)….

For commercialised civilian aircraft, the Maintenance manuals are available through O.R.I.O.N. Online accessible in AirbusWorld collaborative platform, or through the O.R.I.O.N. mobile application (App.) for tablets or smartphones. The App. includes smart features such as a powerful search function, and a possible offline use to cover remote areas operations. TechData can also be provided on demand in PDF format through the web portal, or in paper.

For commercialised military aircraft, the Maintenance manuals are available as a set of PDF manuals on USB stick (Evidoc) or online through AirbusWorld collaborative platform. TechData can also be provided on demand on O.R.I.O.N. through AirbusWorld or at your premise, or in paper.

On top of Technical Data updates, important notices are distributed in real-time through the Airbus Helicopters T.I.P.I. application (Emergency & Alert service bulletins, Technical Information Publications on Internet) and iOS app.

The engines documentation is provided by the engine manufacturer.

O.R.I.O.N

This online service is dedicated to the distribution of the technical data. It is available through your AirbusWorld collaborative platform and in mobile version. Airbus Helicopters recently deployed a major update of its O.R.I.O.N viewer, which offers a single online/offline solution adapted to mobility requirements.

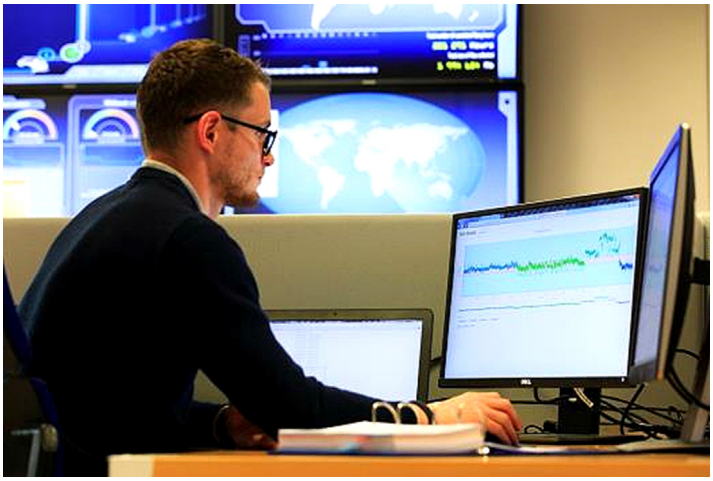
This new O.R.I.O.N version, available for all helicopters in the civil range, is made more efficient and simple with additional features:

- Online/offline synchronization: maintenance preparation offline (notes, inspections, bookmarks) and synchronization as soon as an Internet connection is available
- Easy download from AirbusWorld: download of up-to-date TechData on mobile devices, for an utilisation next to the aircraft
- Powerful search engine: easier and faster
- Advanced filtering: by version, S/N, manual types, ATA chapters
- Immediate printing: TechData printing as displayed on your screen
- Direct link to AirbusWorld technical request function and ordering service (cart from Illustrated Parts Catalog)
- "Pre-print" advanced information: TechData accessible as a PDF document in advance before a standard release (normal or intermediate revision)
- Compatibility with all devices: access online/offline on PC/Mac/Tablet/Smartphone (windows, Mac OS, iOS and Android)
- Cloud based for more availability

FlyScan

FlyScan suite of Health & Usage Monitoring Services offers proactive Airbus Helicopters expert analysis, and allows operators to closely follow-up the status of their fleet.

These services lead the way to predictive maintenance, and will boost your operations by anticipating in-service symptoms, thus enhancing safety and fleet availability, while reducing maintenance burden.



- **Advise**: a service dedicated to organisations already using HUMS monitoring. Airbus Helicopters provides proactive feedback and a weekly review of main components for better events anticipation.

- **Supervise**: a service for customers without vibration analysis team in their organization. Airbus Helicopters manages the various thresholds implemented, and closely monitors any event that occurs in the fleet thanks to data instant sharing.

- **Guard**: A service for operators already managing a HUMS to predict maintenance actions. Airbus Helicopters brings its expertise to operators' doorstep, supporting teams in the surveillance of their fleets and committing to responding to AOG requests within a few hours.

FlyScan now expands its predictive domain over vibrations analysis to treat other data types such as Usage (flight limitations, cycles and various counters monitoring), Flight parameters (flight data recording), and Avionics codes (flight failure surveillance).

Main benefits:

- Improved anticipation
- Increased proactivity
- Enhanced mission efficiency

7.4 Training & Flight Operations

At Airbus Helicopters, our key priority is to make our customers operate their rotorcraft safely and efficiently.

Each year more than 8,000 pilots and technicians trainees rely on our 18 training and/or simulations centres positioned worldwide to obtain their qualifications. We provide extensive support to prepare them for their missions.

We continuously improve our training services & means with cost-effective and tailored solutions, targeting continuous customers' experience improvement with us.

We provide the latest technologies and most rigorous OEM standards.

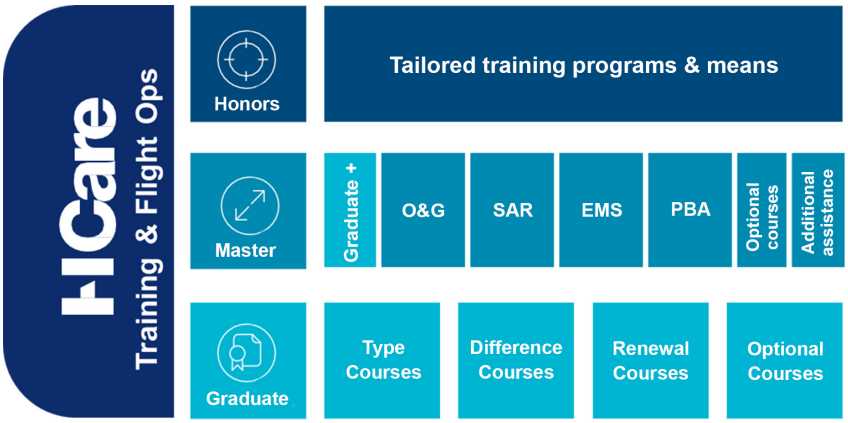
Full-Flight-Simulators:

Our training network is equipped with 25 state-of-the-art Flight Navigation Procedure Trainers (FNPT), Flight Training Devices (FTD) and full flight simulators embedding the OEM Sim Data Pack that provides the most true-to-life experience possible.

Full-scale mock-ups:

Our training centers are also equipped with many full-scale mock-ups offering trainees an experience similar to what it would be on a real aircraft.

Three lines of services are put at operators' disposal for both pilots and technicians:



Graduate

- Standard type qualification
- Optional courses include pre-entry and reinforcement modules

Master

- Standard type qualification enriched by a specialization on favorite mission equipment
- Optional courses and additional assistance

Honors

- Fully customised program according to operators' needs including:
  - Pre-entry, type qualification and/or maturation modules
  - Possible delivery of customised training media and means
  - Instructors detachment and on-site pilot assistance
  - Possible set-up of new training centre on-site

Basic Training Courses

Perform online course like "English Assessment for Helicopter Technicians", this module aims at testing your knowledge in the technical English language.

Additional type rating and refresher courses

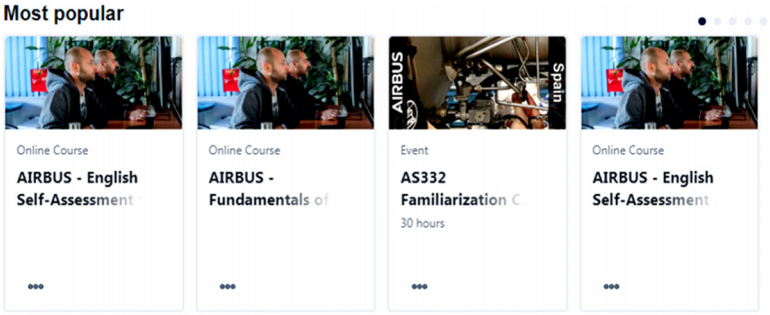
Learning Management System (LMS)

The worldwide training catalogue is now available on Airbus Helicopters' Learning Management System in:

France	Germany	USA
Chile	Mexico	Japan
Spain	Malaysia/Singapore	Brazil

Additional regions will follow progressively.

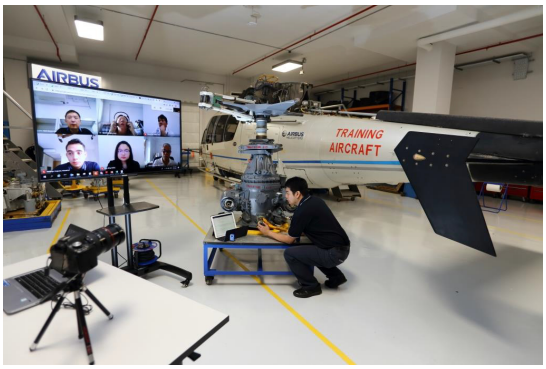
Through this online platform, customers can perform the following:
- Consult the worldwide training catalogue
- Browse training materials and courses information
- Check course schedules
- Register in the Learning Management System and enroll in courses
- Perform a pre-entry-level self-assessment
- Access the catalogue through the LMS regional portals



Distance learning

Since 2020, Airbus Helicopters has set up distance / blended Learning solutions that are available for any of our (French and English speaking) customers in the world. These solutions are a mix of distance learning and classroom training, allowing operators to perform part or total theoretical trainings (depending on specificities) locally, at home or in their local premises. A dedicated team is in charge to develop programs of instruction specifically designed for Distance Learning. These programs include Virtual Classroom sessions as well as eLearning modules for self-studies.

The list of available Distance / blended Learning courses can be consulted online in our LMS.



Flight operations

Airbus flight operations services are designed to support pilots and crews, aiming to support the entry into service of a newly delivered aircraft. They also ensure that Airbus Helicopters support is continuously adapted to customer flight operations requirements by improving the overall level of quality and Safety.

Consisting of:

- On site pilot assistance when required or requested to provide operators with customized additional training flights
- Ops documentation depending on aircraft range:
  - Quick Reference Handbook (QRH),
  - Flight Ops Briefing Notes (FOBN): operational documentation,
  - Flight Crew Operating Manual (FCOM): guidelines for Standard Operating Procedures constitution,
  - Operational Suitability Data - Flight Crew Data (OSD-FCD): EASA Type Specific training requirements.
- eApps: applications for tablets to support pilots in flight operation on modern aircraft and performances management (Refer to connected services products for description).
- Crew Help Desk (online support) as part of the global AH Technical Support for handling queries relative to best knowledge and operation of the helicopter among e.g. regulations, aircrew publications, aircraft limitations, performance, procedures/operations and systems. Refer to technical support information.

Any question can be raised 24/7 through your AirbusWorld collaborative platform (Request function) **https://airbusworld.helicopters.airbus.com**/ or by email at:
customersupport.helicopters@airbus.com

Engine training courses

Training courses dedicated to Engine Maintenance are also organized by the engine manufacturer and their approved centers over the world.

- Safran Helicopter Engines through "Operator On-Line" Support (tools website): Up-to-date course calendars, on-line tests and eLearning modules.
- Pratt & Whitney Canada through FlightSafety International and its worldwide network: engine maintenance.

7.5 Connected Services

Connected Services pave the way to faster and easier data exchange between the helicopter manufacturer and the operators, allowing Airbus Helicopters to improve continuously its support and the performance of its services.

The smart interpretation of flight and maintenance data allows:

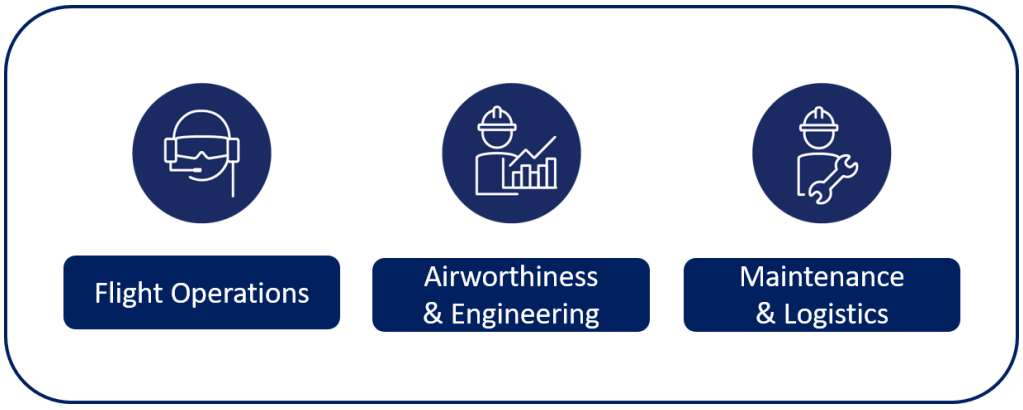
- Higher fleet availability
- Enhanced operational safety
- Optimized costs
- Sustained asset value

HDataPower
Your gateway to digital operations

The **HDataPower** pack is aimed at supporting Helionix-equipped helicopters at all steps of an operator's journey, with an uninterrupted digital chain of solutions fully integrated with Airbus Helicopters systems.

The pack is designed to boost flight, airworthiness and maintenance operations through easy-to-use digital solutions. It offers the best combination of services needed to optimise helicopter operations. Airbus Helicopters collects data from operators' aircraft and information systems to provide them with pertinent solutions.

This full end-to-end operational chain covers three main fields and encompasses below services:



7.5.1 Connectivity

Connectivity services

D-Box

Mobile device service enabling easy helicopter data transfer via Wi-Fi to Airbus Helicopters or other authorized end-points

- Downloading of aircraft data
- Data transfer to Airbus Helicopters enabling digital services
- Management of the compact flash card (format)

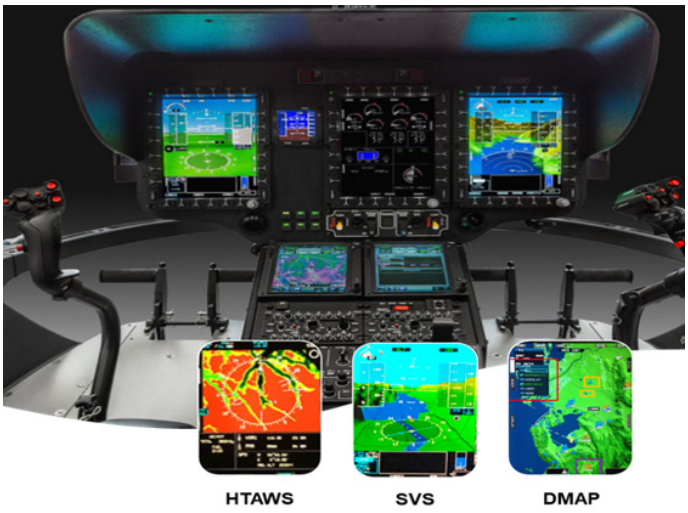
7.5.2 Flight Operations

Aeronautical databases

Aeronautical data service & Airbus Helicopters data loader.

Provides maps, including cyclic and non-cyclic data, converted into Helionix format for onboard display on Multi-Functional Display (MFD).

- Integrated functions such as Helicopter Terrain Awareness and Warning System (HTAWS), Synthetic Vision System (SVS), Digital maps (DMAP)
- On-board loading using Airbus Helicopter Data Loader (basic licence included)



Flight data analysis

Flight analyser (basic licence)

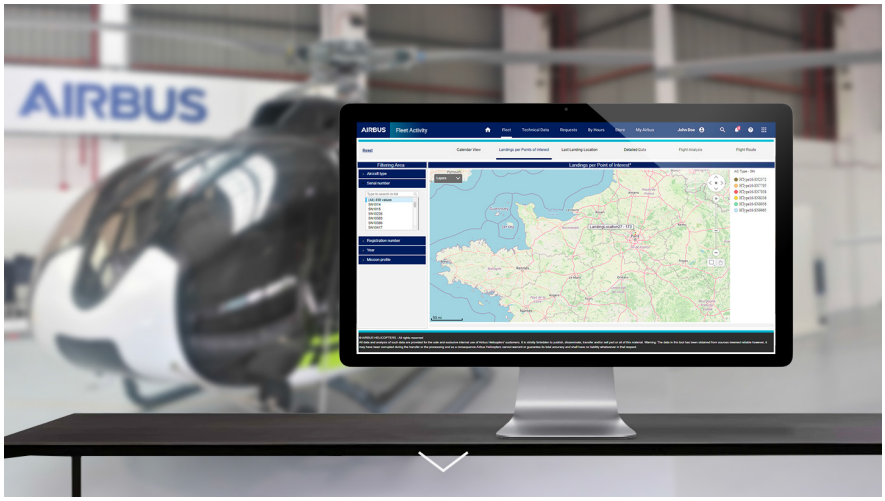
Supports operational safety by automatically analysing helicopter data post-flight to detect events

- Automated flight data analysis for Helicopter Flight Data Monitoring (HFDM) purpose
- Flight page displaying all flights performed
- Flight route reconstitution and flight parameters display
- Automatic data confidence check

Fleet activity

Analytics service that provides a visualization of helicopter flight data to monitor fleet activity and support decision making

- Detailed calendar view
- Key flight details
- Total landings per locations on a selected period
- Flight take-offs and landings on a map



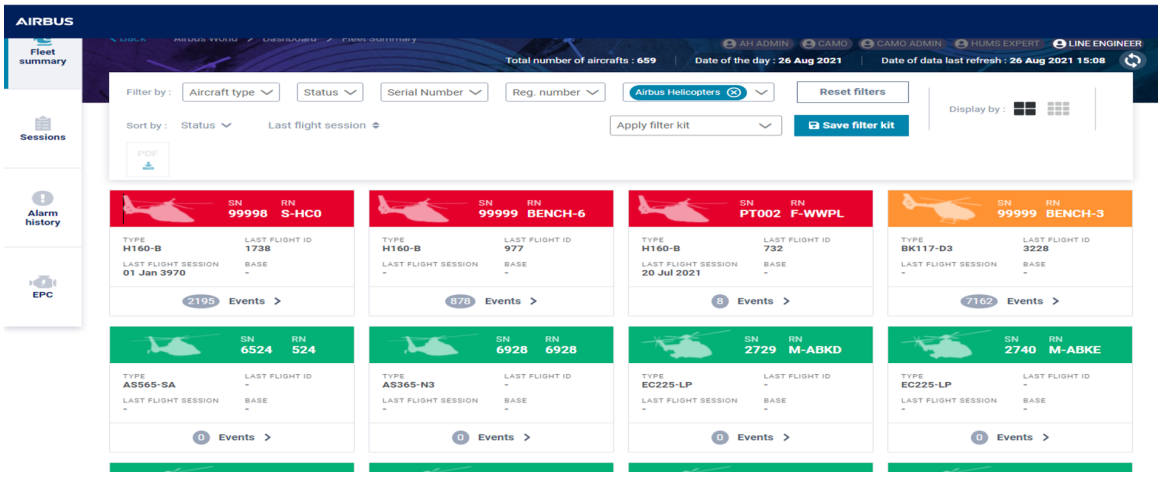
7.5.3 Airworthiness & Engineering

Fleet airworthiness management

FlyScan - fleet monitoring

Analytics service based on UMS[2] data generated by the helicopter to assist Airworthiness officers in their daily activities.

- Real time fleet airworthiness status
- Flight sessions management
- Validated sessions export to Maintenance Information System (MIS)



Reliability / Fleet availability monitoring

Reliability eReporting

Analytics service that allows fleet availability monitoring and elaboration of improvement plans.

- Scheduled maintenance optimization through close monitoring of unavailability root causes
- Detailed analysis of failing parts, or parts with long lead times

2. Usage Monitoring System

Fleet availability monitoring

Allows to monitor parts reliability and consult worldwide fleet analysis established by Airbus Helicopters experts.

- MTBUR[3] drivers analysis and technical synthesis
- MTBUR[3] figures over the past 5 years

7.5.4 Maintenance & Logistics

Troubleshooting and failure management

eDynamic troubleshooting

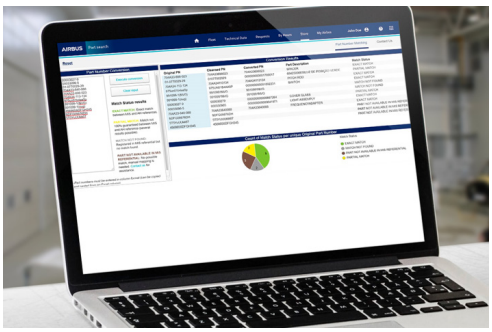
Assists operators in fault isolation during investigation on default or findings reported on the helicopter.

- Dynamic sequence of questions and tests converging to root cause identification

Parts list & orders preparation

Part search

Solution allowing to get part numbers converted into Airbus Helicopters part numbers with associated descriptions.



3. Mean Time Between Unscheduled Repairs

7.5.5 Options to the HDataPower Pack

Maintenance Information System (MIS) based on Envision

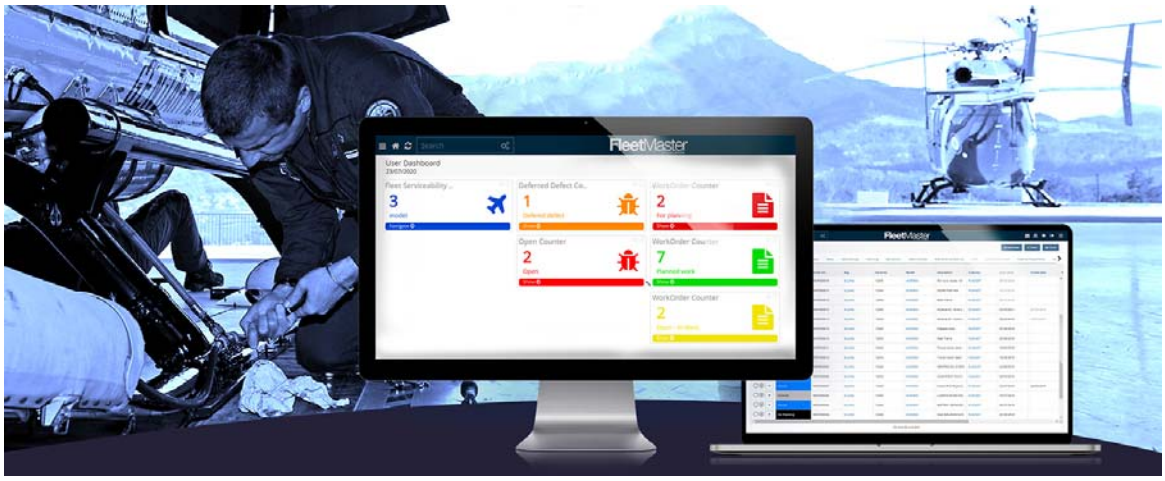
MIS datapack

Digital files provided at H/C delivery to easily record configuration & maintenance data within operators' Maintenance Information System. This service leads to significant maintenance burden reduction.

Concerning the Maintenance Information Systems (MIS) described below, Airbus Helicopters will propose the best-suited solution according to operator's profile.

Fleet master

Cloud-based SaaS (Software as a Service) proposing a Light Maintenance Information System (MIS). It enables operators and maintainers to manage their helicopter airworthiness, maintenance and logistics from anywhere in the world.



Envision comply

Light Maintenance Information System (MIS) installed on operators' network, allowing to manage their helicopter configuration, reliability & serviceability, technical records and more, keeping aircraft fully compliant and ready to fly.

Envision nGen

Comprehensive, modular and customisable Maintenance Information System (MIS) powered by Rusada and commercialised by Airbus Helicopters, for the management of helicopter airworthiness, maintenance and logistics operations.

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8 Abbreviations

Abbreviation	Meaning
AAT	Air Ambulance Technology
AC	Alternating Current
ACS	Air Conditioning System
ACU	Audio Control Unit
ADELT	Automatic Deployable Emergency Locator Transmitter
ADF	Automatic Direction Finder
ADS-B	Automatic Dependent Surveillance Broadcast
AEL	Aerolite
AEO	All Engines Operating
AFCS	Automatic Flight Control System
AFT	Aft
AGL	Above Ground Level
AGW	Alternate Gross Weight
AH	Aibus Helicopters
AHDL	Airbus Helicopters Data Loader
AHRS	Attitude and Heading Reference Systems
ALS	Airwothiness Limitations section (of the Master Servicing Manual)
AM	Amplitude Modulation
AMC	Aircraft Management Computer
AMLCD	Active Matrix Liquid Crystal Display
AMM	Aircraft Maintenance Manual
ANR	Active Noise Reduction
AOG	Aircraft On Ground
ARIS	Anti-Resonance Isolation System
ARP	Aerospace Recommended Practice
ATA	Air Transport Association of America
ATC	Air Traffic Control
BFE	Buyer Furnished Equipment
BMR	Bearingless Main Rotor
Cat. A	Category A
CAM	Continuing Airworthiness Management
CCP	Cockpit Control Panel
CMP	Continuous Maintenance Program
CECG	Corrosion and Erosion Control Guide
COM	Communication
CS	Certification Specifications
CVFDR	Cockpit Voice and Flight Data Recorder
D - Level	Depot Level
DA	Density Altitude
DACS	Digital Audio Communication System
DMC	Direct Maintenance Cost
DME	Distance Measuring Equipment
DP	Dual Pilot

Abbreviation	Meaning
DTD	Data Transfer Device
DVCS	Digital Voice Control System
EASA	European Aviation Safety Agency
EASA AIR-OPS	Commission Regulation (EU) No 965/2012 of 5 October 2012 - Air Operations
ELRS	External Life Raft System
ELT	Emergency Locator Transmitter
EMS	Emergency Medical Services
EOS	Electro Optical System
EPNdB	Effective Perceived Noise level Decibel
EPNL	Effective Perceived Noise Level
ERS	Enhanced Reality System
EU	European Union
FAA	Federal Aviation Administration
FADEC	Full Authority Digital Engine Control
FAR	Federal Aviation Regulations
FCOM	Flight Crew Operating Manual
FDCR	Flight Data Contiuous Recorder
FDS	Flight Display Subsystem
Fh	Flight Hour
FLI	First Limit Indicator
FLIR	Forward Looking Infra Red
FLM	Flight Manual
FMA	Flight Manual Appendix
FM	Frequency Modulated
FND	Flight and Navigation Display
FNPT	Flight Navigation Procedure Trainers
FOBN	Flight Operations Briefing Note
FTD	Flight Training Devices
FWD	Forward
GPS	Global Positioning System
GRB	Ground Rescue Booklet
GSE	Ground Support Equipment
HD	High Definition
HEELS	Helicopter Emergency Egress Lighting System
HEMS	Helicopter Emergency Medical Service
HF	High Frequency
HFDM	Helicopter Flight Data Monitoring
HICAMS	Helicopter Intensive CAre Medical Service
HIGE	Hover In Ground Effect
HMI	Human Machine Interface
HMS	Health Monitoring System
HOGE	Hover Out of Ground Effect
H-TAWS	Helicopter Terrain Awareness and Warning System
HUMS	Health and Usage Monitoring System
IFF	Identification, Friend or Foe
IHSF	International Helicopters Safety Foundation

Abbreviation	Meaning
I - Level	Intermediate Level
IBF	Inlet Barrier Filter
ICAO	International Civil Aviation Organisation
IESI	Integrated Electronic Stand-by Instrument
IFR	Instrument Flight Rules
IGE	In Ground Effect
ILS	Instrument Landing System
IMU	Inertial Measurement Unit
IOGP	International Association of Oil and Gas Producers
IPC	Illustrated Parts Catalog
IR	Infrared
ISA	International Standard Atmosphere (15 °C at SL)
KTAS	Knots True Air Speed
LARS	Lightweight Aircraft Recording System
LDP	Landing Decision Point
LED	Light Emitting Diode
LH	Left Hand
LMS	Learning Management System
LOAP	List Of Applicable Publications
LTE	Long Term Evolution
Max.	Maximum
MCP	Maximum Continuous Power
MEL	Minimum Equipment List
MIS	Maintenance Information System
MFD	Multi-Function Display
MGS	Maintenance Ground Station
MKR	Marker
MM	Maintenance Manual
MMEL	Master Minimum Equipment List
MSM	Master Servicing Manual
MTBUR	Mean Time Between Unscheduled Removals
MTC	Standard Practices Manual
MTOW	Maximum Take Off Weight
MWIR	Mid-Wave Infrared
NAA	National Aviation Authority
NAV	Navigation
NVG	Night Vision Goggle
NVIS	Night Vision Imaging System
O - Level	Organizational Level
O.R.I.O.N.	Optimized Reader for Internet and Other Networks
OCMM	Online Component Maintenance Manual
OEI	One Engine Inoperative
OEM	Original Equipment Manufacturer
OGE	Out of Ground Effect
OPS	Operations
OSD-FCD	Operational Suitability Data - Flight Crew Data

Abbreviation	Meaning
PA	Pressure Altitude
PAX	Passenger
PC	Personal Computer
PCF	Primary Configuration File
PFD	Primary Flight Display
PGS	Professional Ground Station
PNG	Polycon New Generation
PWC	Pratt & Whitney Canada
QRH	Quick Reference Handbook
R/D	Rate of Descent
RDR	Radar
Rev.	Revision
RH	Right Hand
RNP	Required Navigation Performance
RPM	Revolutions Per Minute
RTCA	Radio Technical Commission for Aeronautics
SAE	Society of Automotive Engineering
SAF	Sustainable Aviation Fuel
SAS	Stability Augmentation System
SB	Service Bulletin
SBAS	Satellite Based Augmentation System
SDS	System Description Section
SL	Sea Level
SLL	Service Life Limit
SRM	Structure Repair Manual
STANAG	Standardization Agreement
STC	Supplemental Type Certificate
SVS	Synthetic Vision System
SWAT	Special Weapons And Tactics
TACAN	Tactical Air Navigation
T.I.P.I	Technical Information Publication on Internet
TAS	Traffic Advisory System
TAS	True Air Speed
TBO	Time Between Overhaul
TCI	Time Change Item
TDP	Takeoff Decision Point
TOP	Takeoff Power
ULM	Ultra Low Maintenance
UMS	Usage Monitoring System
USB	Universal Serial Bus
V_{BR}	Best Range Speed
VDC	Volt Direct Current
VFR	Visual Flight Rules
V_H	Maximum Horizontal Speed
VHF	Very High Frequency
VMS	Vehicle Management System

Abbreviation	Meaning
V_{NE}	Never Exceed Speed
VOR	VHF Omnidirectional Radio Range
VTOL	Vertical Take Off and Landing
V_Y	Best Rate of Climb Speed
WDM	Wiring Diagram Manual

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Manufacturer´s Notes

This document provides general information on the description, specification, weights, dimensions and performance data of helicopters manufactured by Airbus Helicopters and on related services and support. Depending on the exactly selected configuration and/or the respective mission profile, these data may vary. For specific, individual performance data and operating limitations reference shall be made to the approved flight manual and all appropriate documents.

The operational or certification regulations, as defined by competent local authorities, may require as compulsory the installation of some of the recommended or further available equipment as listed in this document, with present document however not being meant to be comprehensive in terms of all worldwide operational requirements. The operator shall be responsible to clarify with its respective local authorities that any potential configuration of the helicopter complies with the regulatory requirements for the area of operation and/or type of mission.

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