



ULAN-UDE
AVIATION PLANT



Ka-226T
light utility helicopter

Main advantages

- **Coaxial main rotors scheme**
- **Perfect for HIGH-MOUNTAIN AREAS**
 - Flight altitude of up to 6,500 m with cargo
 - Takeoff and landing on minimum size sites located at high altitudes of up to 6,000 m
 - Hovering at altitudes of up to 4,500 m
 - Excellent controllability at extreme altitudes in thin air conditions
 - Cross wind (up to 18 m/s) and mountain anabatic wind resistance
 - High rate of climb
- **Efficient for flights OVER WATER SURFACE**
 - Takeoff and landing on the deck of even small vessels
 - Folding main rotors blades
 - Ship-basing capability
 - Cross wind (up to 18 m/s) resistance
 - High precision hovering
 - Emergency flotation system
- **Adapted to URBAN INFRASTRUCTURE conditions**
 - Compact dimensions due to tail rotor absence
 - Confined area takeoff and landing
 - Safe passenger embarking/disembarking while rotor blades are running
 - Low ambient noise level
- **High maneuverability**
- **Low vibration level**
- **Easy piloting**



Lifting people and cargo to various altitudes



Cargo and passenger transportation range in high-mountain conditions*



545 kg. or 5 passengers

Range 450 km

H = 5,000



H = 5,000



*-full fuel tanks taking into account en-route fuel reserve, crew 1 person



Application variants

- Cargo transportation
- Passenger transportation
- Search and rescue operations
- Medevac and CPR
- Patrolling and law enforcement operations
- Over water operations
- Construction and assembling operations
- Training flights



Performance

Maximum takeoff weight, kg	3,600
Empty weight in baseline configuration (without module) kg:	2,118
Maximum payload:	
- Inside transport module, kg.	1,000
- On external sling, kg	1,000
Crew/Passengers, pers	1-2 / 6-7
Maximum speed, km/h	250
Cruise speed, km/h	220
Maximum range (with 500 kg cargo) km	550
Maximum range with installed auxiliary fuel tank, km	800
Service ceiling, m	6,500
Static ceiling OGE, m	4,500
Fuel tanks capacity:	
- Main, l/kg	840/655
- Auxiliary, l/kg	330/255

Assigned service life and TBO of the main components

No.	Name	TBO Flight hours / years	Assigned service life Flight hours / years
1	Планер/Airframe	-*	18,000 / 30
2	Gearbox	2,000/ 10	6,000 / 30
3	Main rotors mast	2,000/ 10	6,000 / 30
4	Main rotors blades	-*	3,000/ 15
5	Upper swash plate	-*	6,000 / -
6	Lower swash plate	-*	6,000 / -

* - scheduled maintenance according to the service life/calendar service life is not required

HELICOPTER BASELINE CONFIGURATION



Airframe

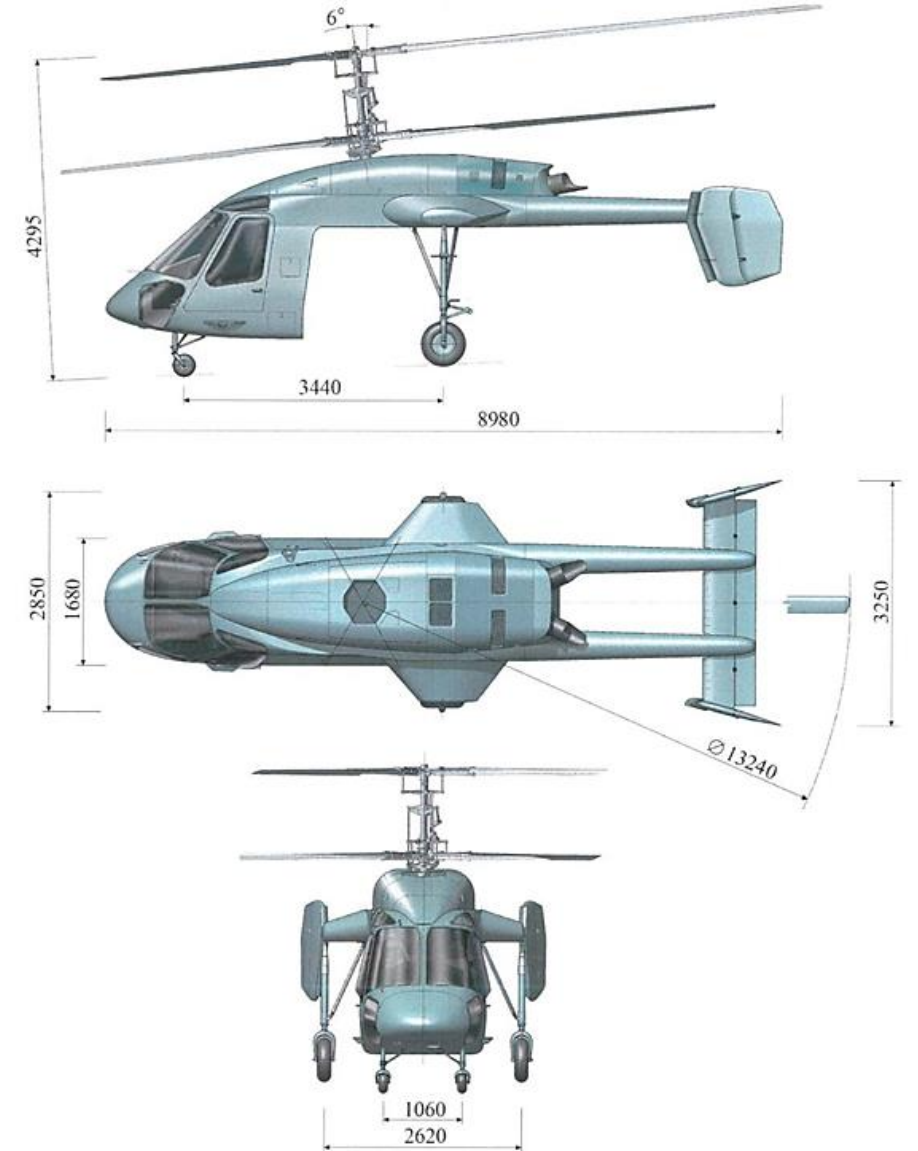
- Enhanced aerodynamics, smooth fuselage contours
- Engine cowlings made of high-temperature carbon fiber
- High-temperature metal tail booms
- Compact dimensions due to tail rotor absence
- Excellent cockpit visibility
- Automated cockpit heating system

Landing gear

- Stable four-wheel landing gear with shock struts
- Running takeoff capability
- Taxiing and towing capability
- Brake system

Aircrew energy-attenuating seats

- Adjustable seats
- Four-point safety harnesses
- Manual and automatic lock of shoulder harnesses



Power plant

VK-650V engines

- Improved high-altitude and climatic performance
- Maximum continuous power of each engine is 650 hp
- FADEC type engine electronic control system
- Start altitude up to 6,000 m
- Possibility of continuous flight with OEI

VK-650B



Rotor system

Coaxial main rotors scheme

- Composite rotor blades
- No tail rotor
- All rotor blades are interchangeable, do not require additional adjustment after replacement
- Rotor blade folding mechanism



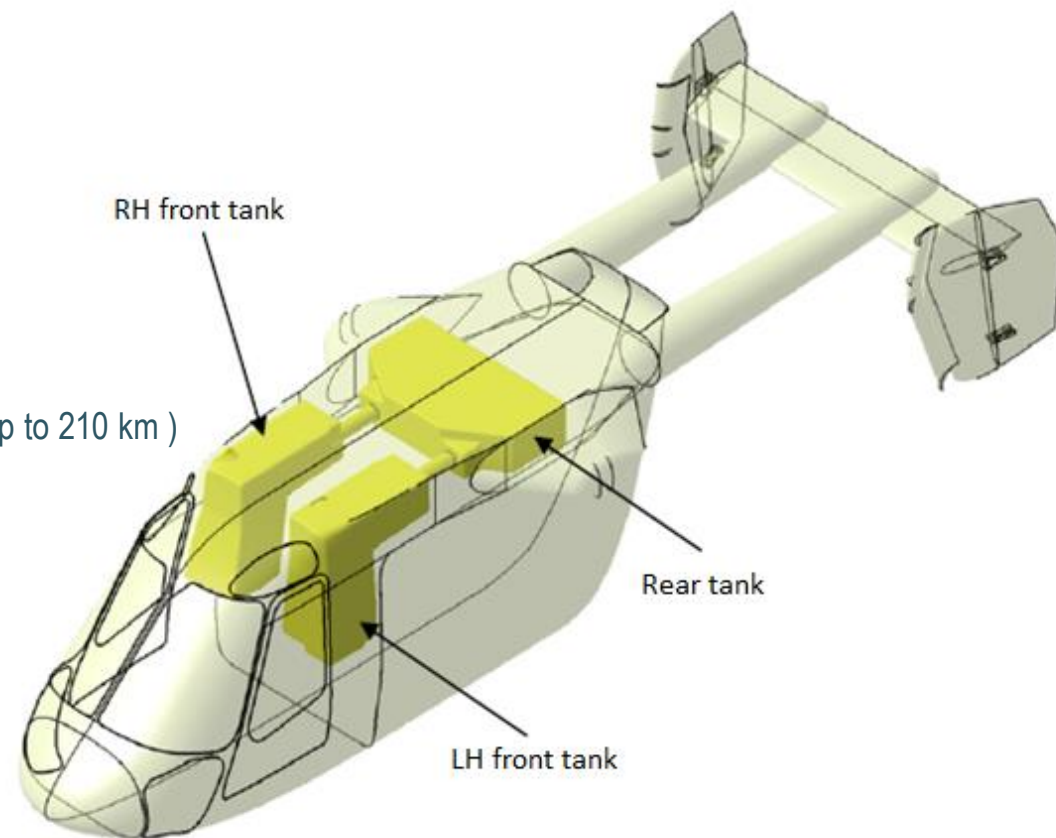
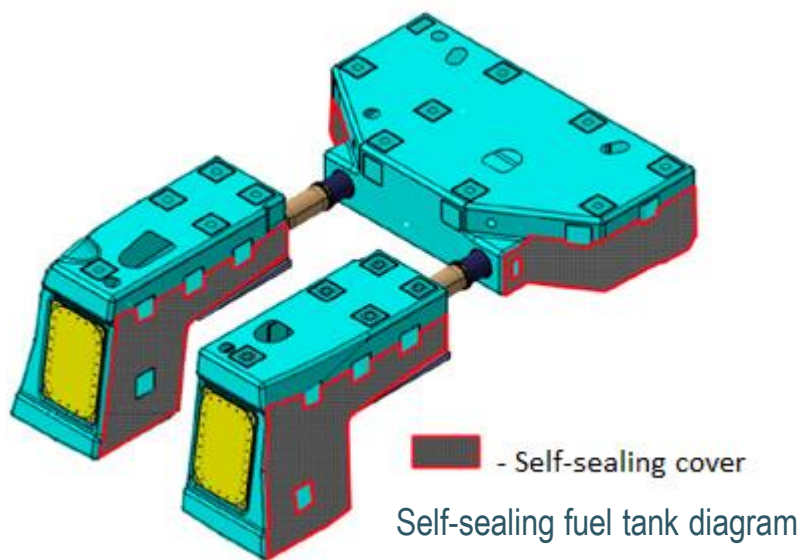
VR-226N gearbox

- 30-minute dry-run operation
- Increased corrosion resistance
- Small dimensions, lighter weight
- Assigned service life – 6,000 hours



Fuel system

- 3 crash-resistant fuel tanks
- Fueling time - 10 minutes or less
- Fuel tanks capacity - 840 l / 655 kg
- Self-sealing fuel tanks (Reduced fuel leakage in case of tank damage)
- Single-point refueling while the engines are running
- Option to install 330 l capacity auxiliary external fuel tank (255 kg) (provides range extension of up to 210 km)



Flight controls

- Cyclic pitch control stick
- Collective pitch control stick
- Directional control pedals
- «PUSH-PULL» type engine and rotor brake control system



Avionics (BREO-226) and radio communication equipment

- Two MFD-141 widescreen multifunction displays
- 6.5" IM-14 indicators - 2 pcs
- 6.5" ISRP stand-by instrument system - 1 pc
- Navigational parameter input device
- Multifunction control panel with satellite receiver supporting GPS/GLONASS
- Attitude and heading reference system
- Low-range radio altimeter
- Air data computer
- Navigation and landing equipment
- Prima-DMV-1 radio station (30,000-399,950 Mhz band)
- Prima-MV radio station (118,000-136,975 Mhz band)
- Emergency locator transmitter



OPTIONAL EQUIPMENT



External cargo sling

- Cargo transportation of up to 1,000 kg
- Weight measuring device
- Control from the cockpit
- Possibility of cargo emergency release
- Construction and assembly operations
- Sling maximum length - 70 m.
- Sling minimum length – 5 m.



Cargo platform

- Standard-size cargo transportation without external sling
- Cargo transportation of up to 500 kg
- Improved maneuverability when transporting cargo
- Cargo platform weight - 50 kg



Tie-Down Equipment

Tie-down equipment composition:

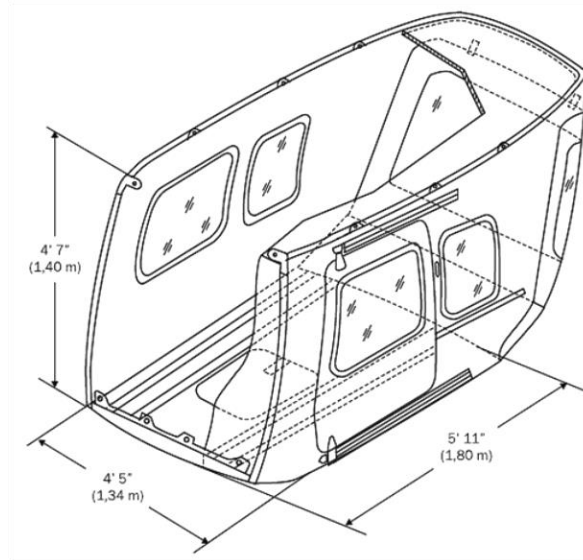
- Cargo net - 1 pc
- Tie-down straps - 14 pcs
- Wheel chocks - 4 pcs
- Tie-down points - 12 pcs

Interchangeable mission module

- Fast replacement of the module with a fixed composition of equipment
- Wide clamshell door at the back of the module
- Right / left sliding door

Mission module options:

- Cargo
- Passenger
- Search and rescue
- Medevac
- VIP



Module dimensions



Module replacement time

45
minutes



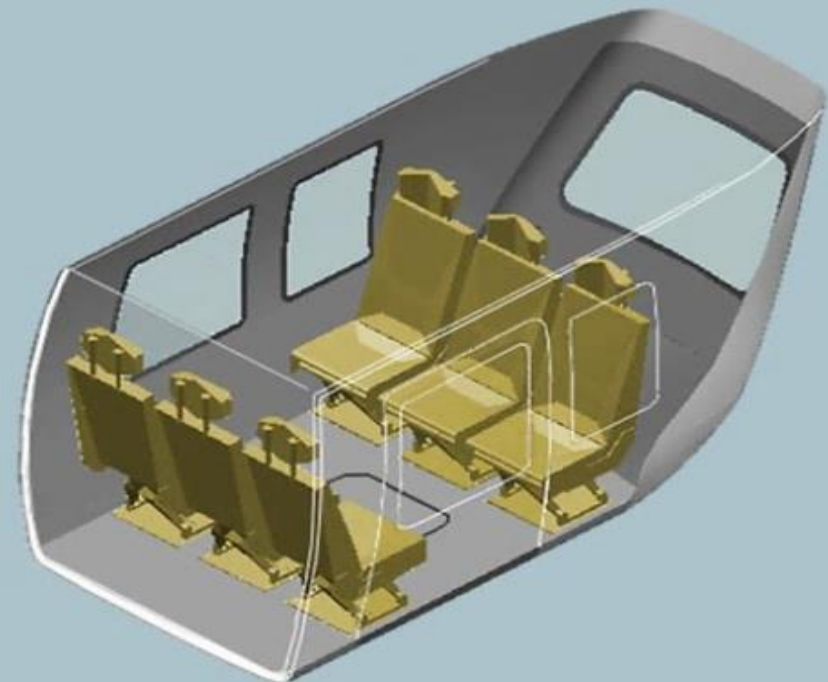
SLG-300 cargo hoist

- Hoisting of cargo and people with a total weight of up to up to 300 kg
- Option to use different rescue equipment
- Hoist cable length - 60 m
- Hoist is operated from the transport module
- Cargo emergency release capability



Energy-absorbing passenger seats

- Transportation of up to 6 passengers on energy-absorbing passenger seats
- Possibility of placing an extra passenger on the co-pilot's seat



Folding seats

- Transport of up to 6 persons in transport module on folding troop seats
- Option to place an extra passenger on the co-pilot's seat



Sanitary stretchers

- Evacuation of up to 2 people laying down
- Accompanying medical personnel of up to 2 people on folding seats
- Easy stretcher loading/unloading through the wide clamshell door at the back of the transport module



Medical module

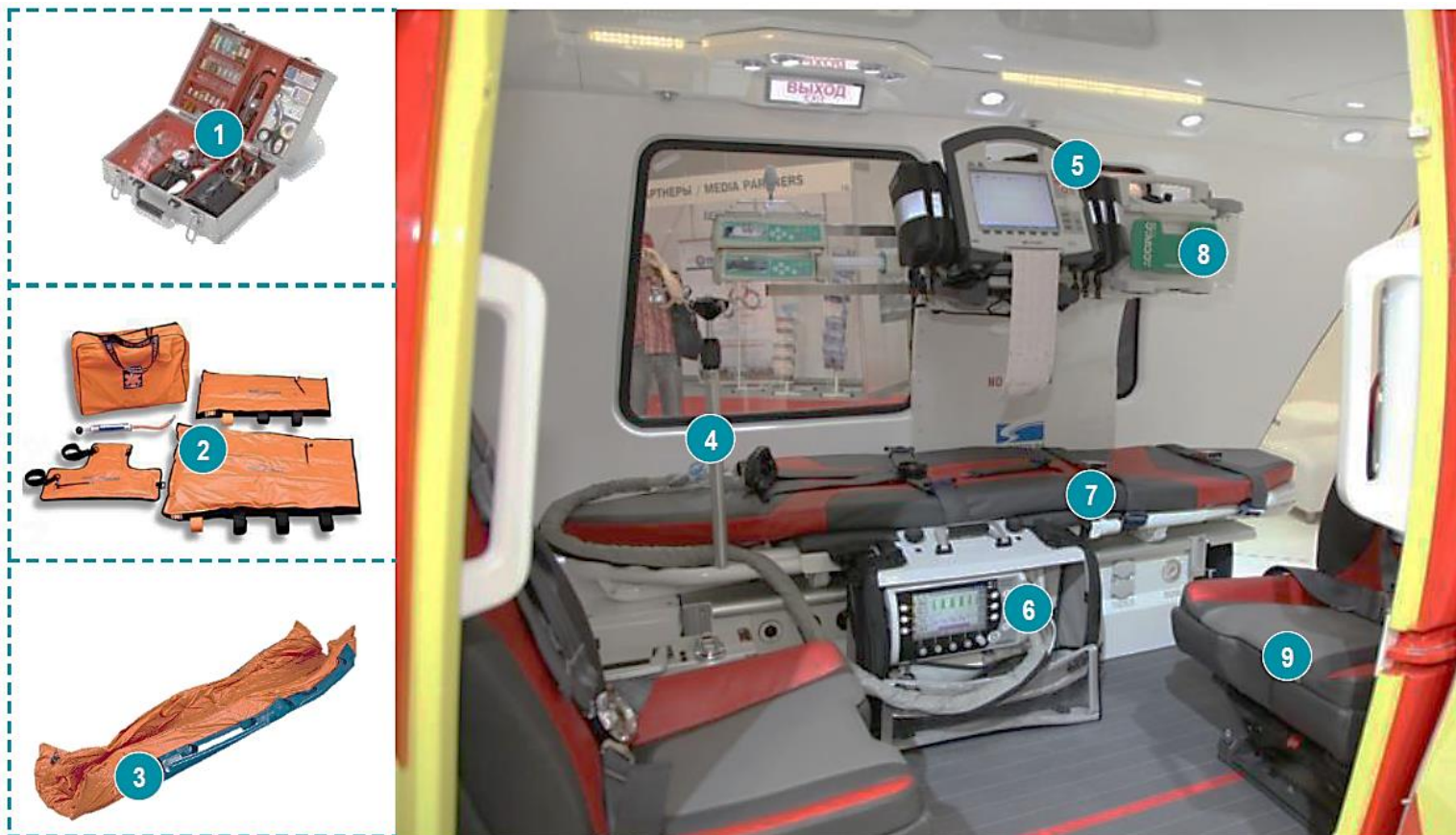
- Medical evacuation of one injured person in life-threatening and severe health conditions
- Accompanying medical personnel of up to 2 people
- Continuous health monitoring and basic life support of injured person
- Provision of specific medical care
- Easy stretcher loading/unloading through the wide clamshell door at the back of the transport module



Medical module

Medical module and equipment composed of:

1. First aid kit
2. Vacuum splint
3. Vacuum mattress
4. Rack for internal injections
5. Device for artificial pulmonary ventilation
6. Defibrillator
7. Removable stretcher
8. Aspiration line
9. Chairs for medical personnel



Engine dust protection devices

- Cleaning the air entering the engines from sand and dust
- Extension of engine life
- Rapid installation and removal



Oxygen supply system

KKO-VK-L oxygen system:

- Oxygen supply for crew and passengers at altitudes above 3,000 m.
- Cylinder capacity 3 liters, duration of use 2 hours
- The set of KKO-VK-LP oxygen equipment includes:
 - oxygen supply unit and oxygen mask
 - adapter hose



Air conditioning system

- Comfortable temperature condition in the cockpit and transport module in conditions of high temperature of ambient air
- Maintaining the temperature set by the crew and passengers



Air conditioning unit

SGU signal loudspeaker device

- Annunciation and issuing of commands through external acoustic systems during search and rescue, transport operations
- Three types of electronic siren signals
- Record and further multiple playback of up to 3 min duration of voice or audio signal
- Signal volume control



SGU unit

Cockpit adaptation for usage of night vision goggles (NVG)

- Helicopter operation for night time missions
- Nap-of-the-earth capability
- NVG use in visible and covert modes
- LED with high lumen efficiency and lower power consumption



Night vision goggles and ZSh-7V
protecting helmet





Searchlight

- Night time missions
- Covered search operations using IR filter
- Illuminating range of up to 1,000 m
- Cockpit operated

Optoelectronic surveillance and observation system

- Round-the-clock detection, recognition, capture and automatic target tracking
- Measurement of the slant range distance to the object in VFR and IFR weather conditions.
- Image and information output to the operator's console and to the cockpit indicators
- Cockpit operated capability
- Capable of transmitting information to a mobile ground control station



Gyrostabilized platform



Emergency flotation system (EFS)

- Emergency helicopter landing on the water for passengers and crew evacuation
- Compact system arrangement on the helicopter airframe
- Quick activation
- Helicopter stay afloat time - minimum 30 min at admissible sea state of up to 4 points
- Life rafts and vests for crew and passengers



Detachable skids

- Operation of the helicopter on unpaved areas with low ground strength (snow, sand, etc.)
- Unobstructed helicopter movement on the solid ground (surfacing)
- Fast installation and removal





VIP module

- Elegant design
- Functional interior
- 4 ergonomic chairs of enhance comfort
- Individual tables
- Airborne multimedia system
- Spacious luggage drawers and luggage compartment
- Air conditioning and heating system

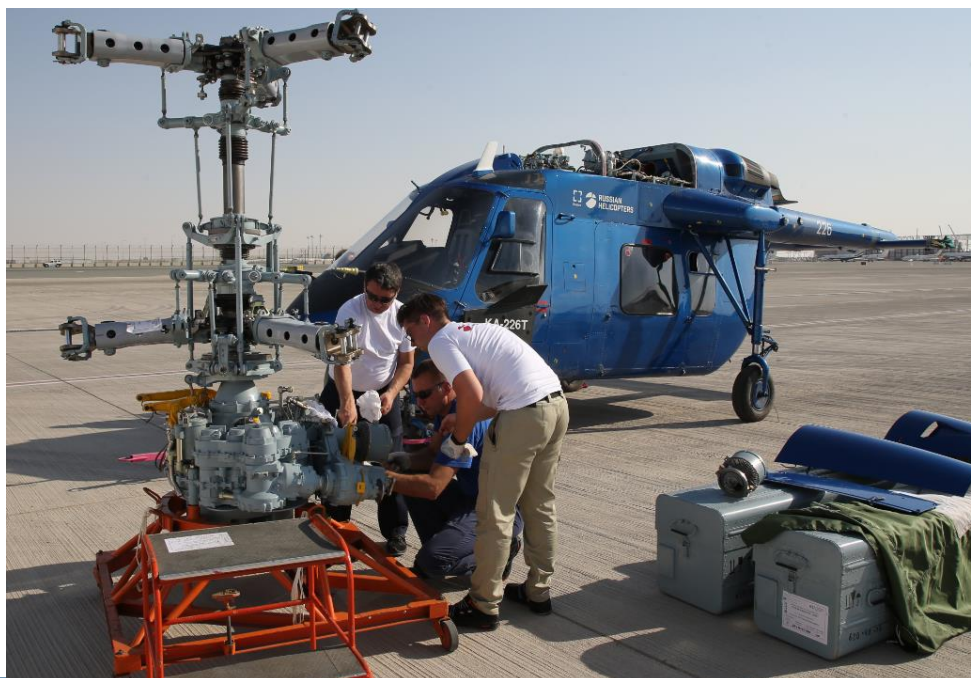




After-sales service

JSC «Russian Helicopters» and JSC «U-UAP» provide with:

- Warranty and post-warranty service
- Delivery of spare parts, tools, and ground support equipment
- Overhaul and reconditioning repair
- Helicopter upgrading



Training and retraining of flight and maintenance personnel

- Certified aviation training center
- Helicopter training simulator for practicing piloting skills
- State-of-the-art computer technologies
- High-quality visual aids
- Teachers and instructors with many-years' experience and thousand of flying hours



Thank you for attention!

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