RUSSIAN HELICOPTERS

Mi-171A2
certified
VVIP helicopter

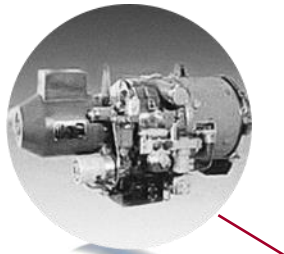
Mi-171A2 helicopter key advantages

- High performances
- VIP passengers transportation in enhanced comfort conditions
- Integrated flight and navigation system with digital autopilot
- High safety level
- Efficient operation and maintenance system
- Extended service lives

Main design features

VK-2500PS-03 engines with FADEC system

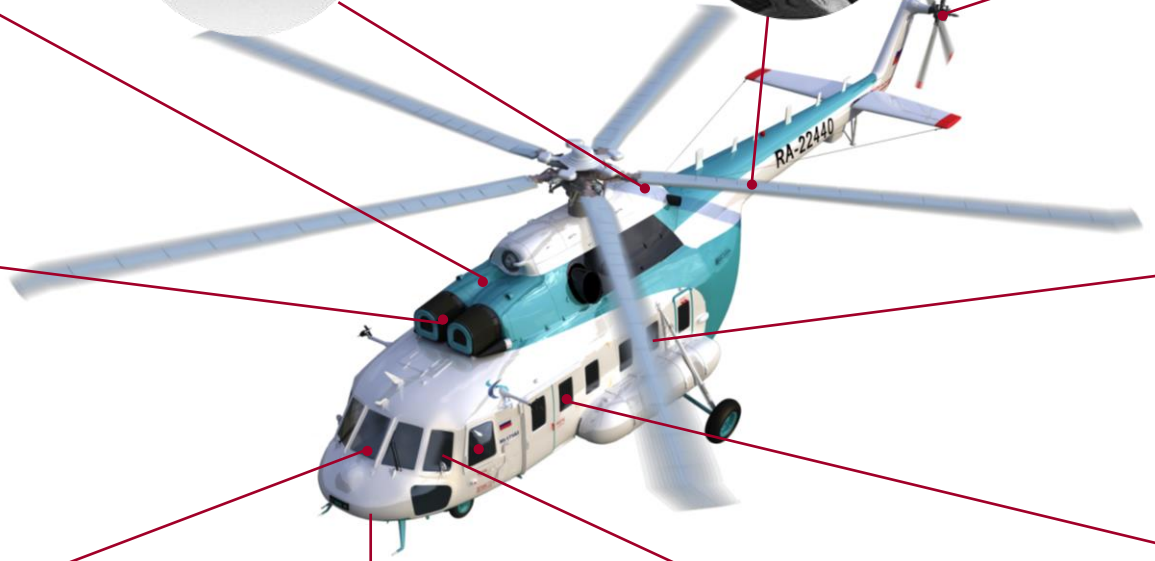
TA-14-130-08 or SAFIR 5K/G MI APU

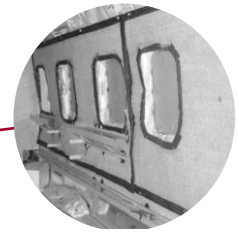


Composite MR blades with enhanced airfoil

X-shaped tail rotor

Dust protection device with a high degree of purification

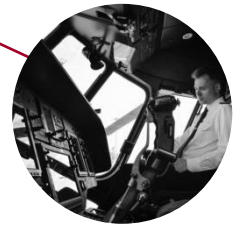




Improved heat and sound insulation

Integrated flight and navigation system with digital autopilot

KOS-17-1 Day-and-night surveillance system



Crew reduced to 2 members

Air conditioning, ventilation and heating system

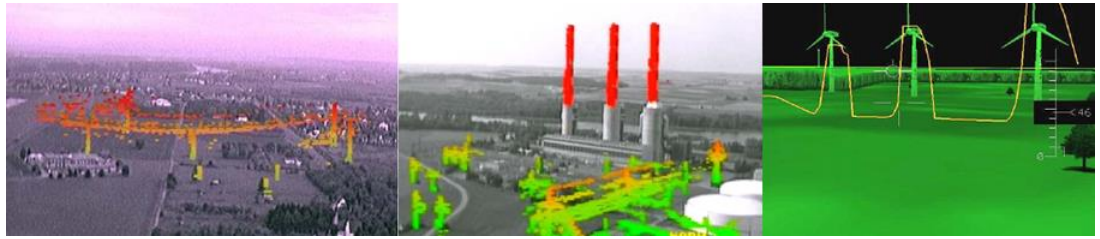
KBO-17 Integrated flight and navigation system

- New generation PKV-171A digital autopilot with redundancy function
- Automatic fight mode without Pilot's interference:
  - automatic altitude capture
  - automatic flight correction and stabilization
  - automatic hovering
  - automatic approach
- Improved stability and controllability of the helicopter
- Flight safety in manual, automatic, combined control modes
- Enhanced situational awareness for the helicopter crew
- Day-and-night surveillance of external environment
- Integrated stand-by instruments system
- Wide frequency range radio communication complex (VHF, HF)
- Piloting by two crew members
- Crew workload reduction

KOS-17-1 Day-and-night surveillance system

Forward looking TV/Thermal imaging system

Aft looking camera



- Round-the-clock surveillance of front/aft/lower sections of external environment
- Search and detection of potentially dangerous objects on the flight route
- On-board image display

Power plant

VK-2500PS-03 Engines

- Increased emergency power up to 2,700 h.p.
- FADEC Engine Digital Control System
- Anti-surge control
- Continued take-off and flight with OEI within 60 minutes

Auxiliary power unit

TA-14-130-08

- Start altitude on ground up to 5,000 m
- Continuous operation time in generator mode 6 hours, for autonomous power supply of power-intensive equipment on the ground
- Unit power 30 kW

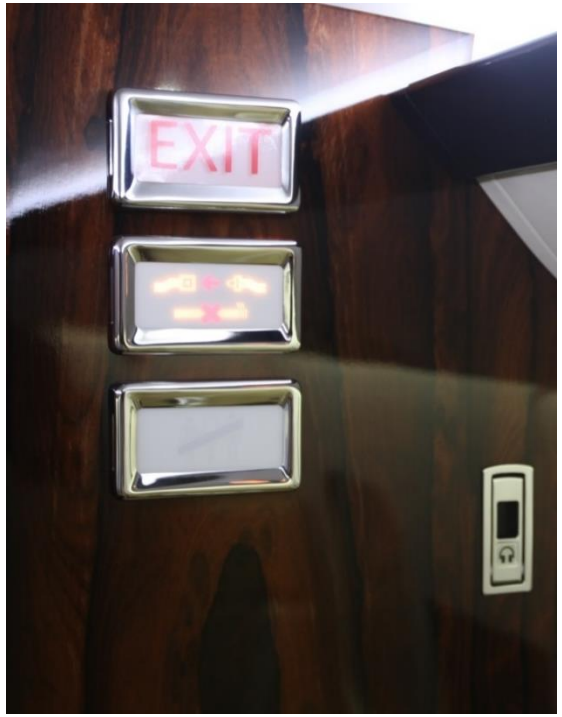
or

SAFIR-5 K/G MI

- Start altitude on ground up to 6,000 m
- Continuous operation time in generator mode 5 hours, for autonomous power supply of power-intensive equipment on the ground
- Unit power 20 kW

VVIP cabin (emergency exits)

Exterior lighting of emergency exits



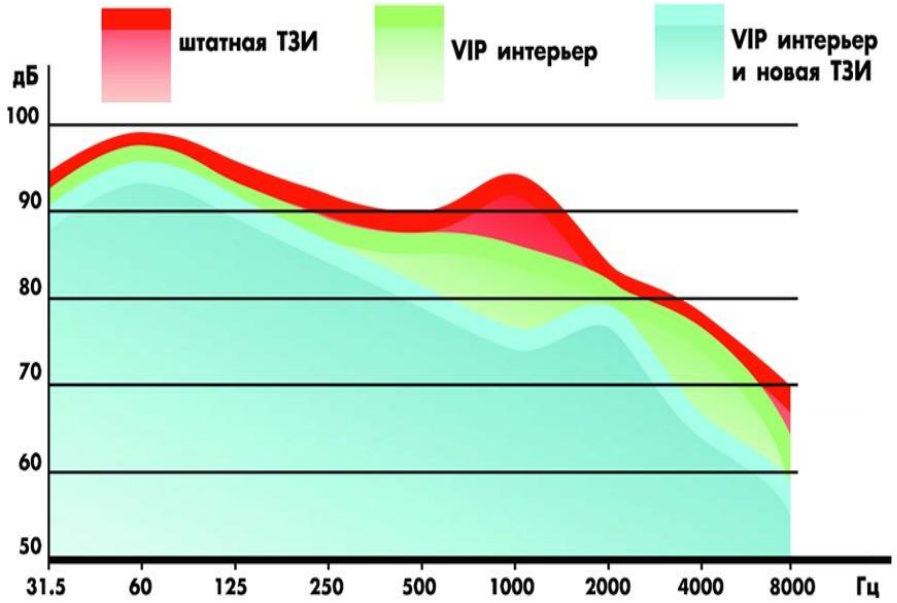
Rectangular windows of passenger cabin with double glazing

Enlarged emergency hatches with double glazing

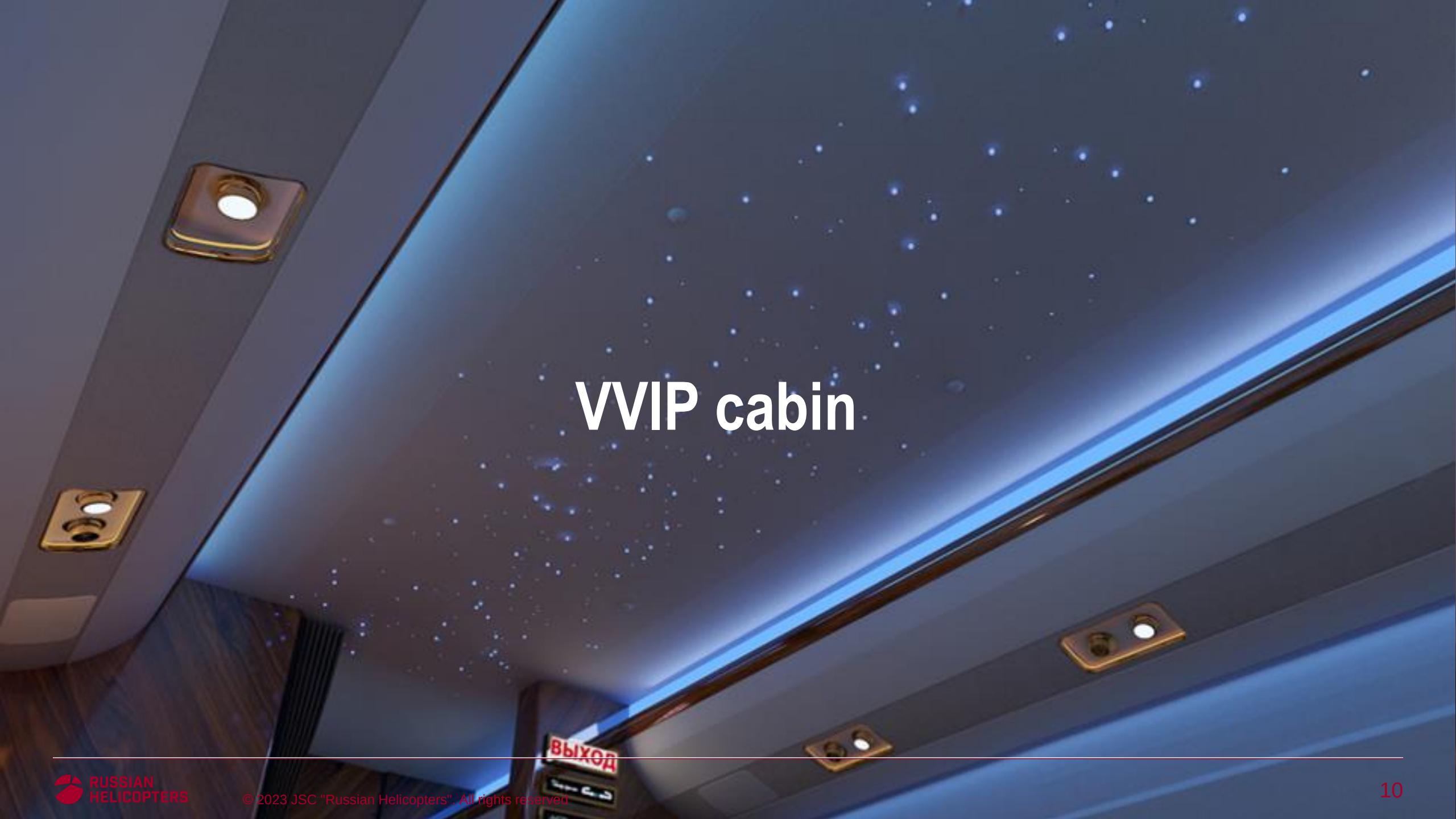
VVIP cabin (heating and air conditioning systems)

- Comfortable temperature environment
- Climate control
- High efficiency
- Small dimensions
- Multifunctionality of application implemented in one device
- No refrigerant required

VVIP cabin (heating and sound insulation systems)



- State-of-the-art high-tech materials that do not absorb moisture with reduced thermal conductivity
- Reduction of noise to a level that ensures normal passenger communication without the use of technical devices (headsets)
- Effective heat preservation inside the helicopter on the ground and in flight
- Decreased vibration of passenger cabin's structural and power elements



VVIP cabin

VVIP cabin layout

1. Service compartment
2. Galley
3. Partition with a curtain
4. Recliner
5. Folding table
6. Recliner
7. Passenger chair
8. Partition with a bifold door
9. Wardrobe
10. Folding seat
11. Folding seat
12. Stand
13. Three-seat couch
14. Stand
15. Passenger chair

VVIP cabin (aft view)

- All finishing materials, vendor items and equipment are made by world industry leaders and have all the certificates required for approved aircraft application

VVIP cabin (forward view)

- Three-section deployable couch is located portside. Slope angle of the couch backrest can be adjusted and reclined.

VVIP cabin (escort section)

- Two twin seats are located in escort section. The seats are fitted with three-point inertia safety belts. Each seat can accommodate two passengers.

VVIP cabin (built-in multimedia system)

- High resolution LCD displays
- DVD, MP3 players
- Climate control
- Light control
- USB sockets
- Individual control panels

VVIP cabin

Terrain map and flight path display

Addressable conference call system

VVIP cabin

Galley

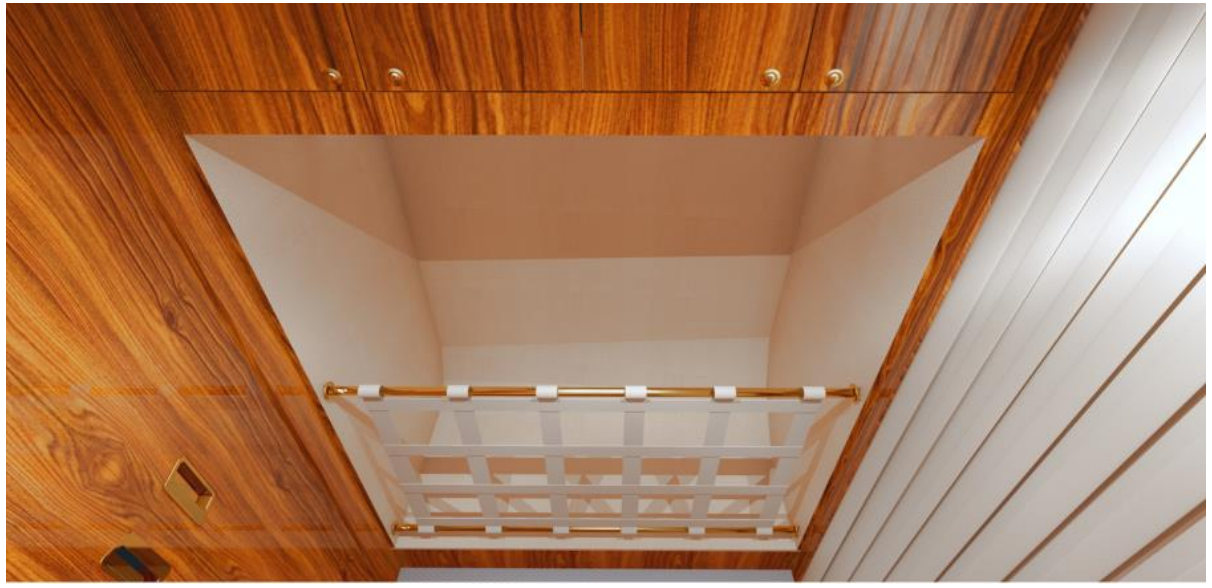
Lavatory

- Galley module with necessary equipment and cutlery for maintaining the high level of service for VVIP passengers during flight
- Lavatory includes hot/cold water supply system, sink, mirror, bio toilet, and personal care items

VVIP cabin

Refrigerator (mini bar)

Wardrobe



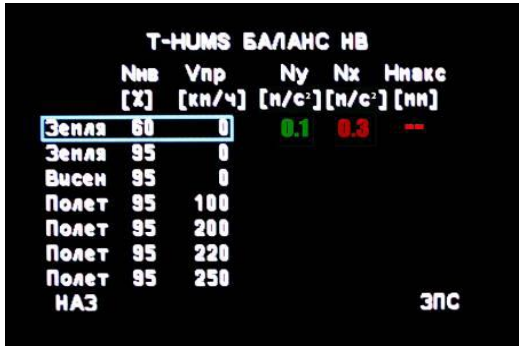
- Helicopter is provided with wardrobe/luggage compartments (starboard side and portside) for personal items and outerwear

High performances

Maximum take-off weight (Category A)	13,000 kg
Crew	2 members
Accommodated passengers	up to 11 pax
Maximum speed	280 km/h
Cruise speed	250 km/h
Service ceiling	6,000 m
Flight range (with main fuel tanks)	800 km
Ferry range (with auxiliary external fuel tanks)	1,200 km
Rate-of-climb with maximum take-off weight	>10 m/s
Permissible operation temperature range	±50 °C
VK-2500PS-03 engine emergency power	2,700 h.p.

Efficient operation and maintenance system

- On-condition maintenance (no overhauls required)
- Reduced scope of scheduled maintenance
- Reduced maintenance labor
- Prompt diagnostics and troubleshooting due to the use of the NASKD-200MB multifunctional test and control system
- Integrated flight and navigation system with build-in diagnostic system
- Malfunction prediction using HUMS
- Increased service life of major units and components



Thank you for your attention