



***ROSTVERTOL***

***MI-26T***



**SCORPION**

INTERNATIONAL SERVICES S.A.

## HISTORY

The Mi-26 multipurpose heavy-lift transport helicopter was an original design of Moscow Mil Helicopter Plant. Initial production and development of its unique eight-blade rotor system was carried out in conjunction with scientists, designers and aircraft builders.

The first flight of the Mi-26 took place in 1977. G.R. Karapetyan, chief-pilot of the Company, headed the crew. The Mi-26 helicopter, combining up-to-date scientific and engineering technology, is THE LARGEST HEAVY-LIFT HELICOPTER WORLDWIDE.

## THE FIRST FLIGHT OF THE MI-26 TOOK PLACE ON OCTOBER 26, 1980.

14 world records were set by the Mi-26 in 1982:

- Interior payload of 10 tons lifted to an altitude of 6,400 m
- Interior payload of 15 tons lifted to an altitude of 5,600 m
- Interior payload of 20 tons lifted to an altitude of 4,600 m
- Interior payload of 25 tons lifted to an altitude of 4,100 m

The first flight of the Mi-26T was on December 25, 1985.



ROSTVERTOL • PRODUCT HISTORY

THE MI-26T IS THE FLAGSHIP AMONG HEAVY-LIFT HELICOPTERS AND CAN CARRY THE HEAVIEST PAYLOAD OF ANY HELICOPTER WORLDWIDE



## CREATED FOR SUCCESS

The Mi-26T helicopter is designed for autonomous operation and does not require special ramps or ladders as the engine and main gear box cowlings serve as ramps when open.

An auxiliary power unit provides:

- Internal engine starting
- Power for operating internal loading equipment during cargo handling operations
- Inspection of airborne equipment
- Air conditioning in the cockpit
- Heating and ventilation of the cargo compartment on ground

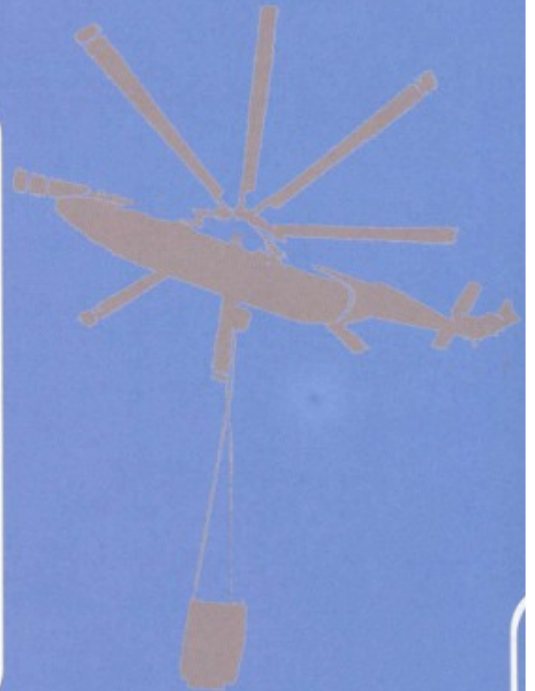
The power plant is fitted with a main rotor automatic speed control and power equalisation system. In case of failure of one engine, the power of the other engine automatically increases up to maximum, providing flight at full load until landing.

The engines are equipped with dust-protection devices to provide protection of the gas flow duct.

The cockpit is pressurised, comfortable, has excellent layout and visibility.

The flight and navigation equipment meets international standards.

The Mi-26T can fly day or night, in all-weather conditions.



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ITS UNIQUE LIFTING CAPACITY, MULTI-PURPOSE OPERATIONAL FLEXIBILITY AND RELIABILITY,  
ALLOW THE MI-26T TO BE USED IN A VARIETY OF CONFIGURATIONS AND APPLICATIONS



### APPLICATION VERSIONS

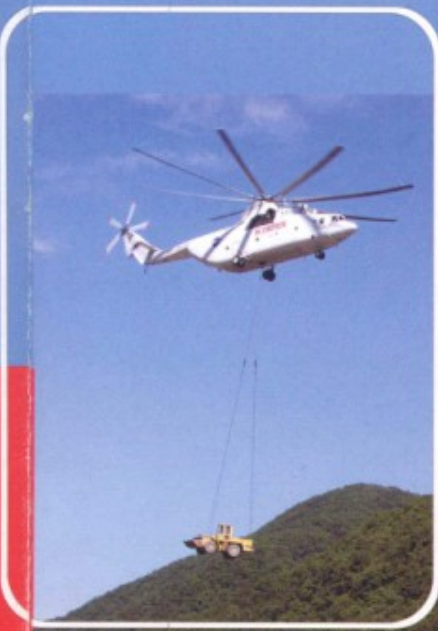
The Mi-26T - multipurpose wide-fuselage transport helicopter represents the pinnacle of the new generation of heavy-lift helicopters and is the largest heavy-lift in the world.

It is intended for the carriage of equipment and bulky cargo with a payload up to 20 tons, either in the cargo compartment or on an external sling.

The Mi-26's equipment enables it to fly around the world on international routes. Its unique lifting capacity, multipurpose use, flexibility and reliability allow the Mi-26T to secure a constantly expanding role and increase its sphere of influence worldwide.

At present the helicopter is successfully used:

- On construction sites
- For the installation of electric power lines
- For raising of rigs and equipment
- For bridge/engineering construction and other complex engineering structures
- For fire-fighting
- For logging
- For fuel supply and refuelling
- For evacuation of casualties from remote and inaccessible regions in emergency situations



### ASSAULT-TRANSPORT VERSION

The assault-transport version of the Mi-26(T) is intended for transporting self-propelled and caterpillar vehicles, as well as for construction works at military sites and operations in disaster areas.

The helicopter has a radar warning system and is fitted with a remote decoy-firing system to counter heat-seeking missiles. The cockpit is armour-plated.

The helicopter can be quickly re-configured into:

An assault version completed with 82 light-weight seats

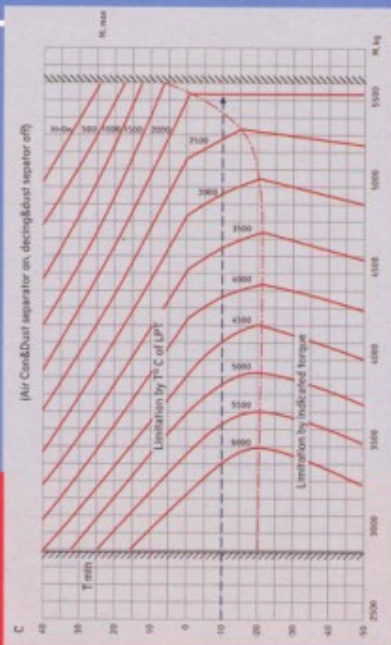
A medical version for transportation of 60 casualties on stretchers with three medical attendants.



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THE MI-26T'S VAST CARGO CABIN ENABLES THE TRANSPORTATION OF BULKY CARGO WITH A PAYLOAD OF 20 TONS INSIDE THE FUSELAGE





### TRANSPORTATION OF CARGO INSIDE THE CARGO CABIN

The helicopter's vast cargo cabin (length - 12m, width - 3.2m, height - 3.1 m) allows for the transportation of large vehicles and cargo weighing up to 20 tons, inside the fuselage.

Loading is carried out through a cargo door in the tail section of fuselage with a lowering ramp and ramp extensions.

Mechanisation of cargo handling operations in the cargo compartment is handled by two electric winches and a telfer, that enables handling of cargo up to 6 tons along the cabin. A clearance control system is available for loading bulky cargo.



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LAY-OUT OF MI-26(T) HELICOPTER





1. Radome
2. Radar antenna
3. Radar electronic units
4. III-band identification equipment antenna
5. I-band identification system antenna
6. Navigation system antenna
7. Landing light
8. Radio altimeter
9. Pitot head
10. Conditioner
11. Cockpit
12. Windshield
13. Windshield wipers
14. Windshield blister
15. Captain's seat
16. Co-pilot's seat
17. Pilots' instrument panel
18. Control stick
19. Collective pitch control lever
20. Directional control pedals
21. Engines' control sticks
22. Glare shield
23. Suspended armor-plate
24. Navigator's seat
25. Navigator's instruments
26. Manual fire-extinguisher
27. Flight-engineer's seat
28. Flight-engineer's instruments
29. Movable blister of flight-engineer
30. Oxygen system
31. Attendants' cabin
32. Attendants' folding seats
33. Emergency abandon door of attendants compartment
34. Cockpit door
35. Medicine chest
36. Pitot head
37. Compartment door of GPU connection
38. Automatic direction finder antenna
39. Nose landing gear (NLG)
40. Main LG wheel
41. Signal flares' unit
42. Cargo compartment
43. Front cargo door
44. Handles and locks of door fixation
45. Command radio station antenna
46. Main cargo cabin winch
47. Auxiliary winch
48. Cargo door for exit to engines
49. Ladder for exit to engines
50. Cargo beam
51. Push-pull control linkage
52. Push-pull control linkage bellcranks
53. Cable control linkage
54. Cargo cabin window push-pull linkage to cable linkage
55. Bag for documentation
56. BREO units
57. Pitot tube
58. Dust protection unit
59. Dust protection unit exhaust pipe
60. Engine cowling
61. D-136 turbo shaft engine
62. Engine's compressor
63. Engine's exhaust pipe
64. Engine's components
65. Oil tank
66. Pipe for air intake from engine's compressor for air conditioning
67. Fuel line and automatic fuel management system
68. Firewall
69. Fire extinguisher bottle
70. Oil cooler of power plant and main gear box
71. Engines maintenance footboard
72. Cowlings of radiator's compartment
73. Main gear box
74. Gear box mount
75. Gear box compartment's ramp
76. Electric generator
77. Junction box
78. Hydraulic system aggregates
79. Main rotor hub
80. Main rotor slip ring
81. Drag hinge
82. Flapping hinge
83. Hydraulic damper of main rotor hub
84. Blade pitch lever
85. Blade pitch rod
86. Swash plate
87. Main rotor blade
88. Blade shank
89. MRB trimmer
90. Blade leading edge section with electro anti-icer
91. Main rotor blade (MRB) tip
92. MRB contour illumination light
93. Service tank No. 9 and 10
94. Oil system pipeline
95. Main fuel tanks
96. Cargo cabin air conditioning pipe
97. Troopers' folding seats in cargo compartment
98. Forward navigation light
99. External load sling
100. External load sling door
101. Cargo attachment point inside cargo cabin
102. Rear emergency ramp of cargo cabin
103. UV-26 chaff and flare launcher
104. Main landing gear (MLG)
105. Main landing gearwheel
106. Navigation system antenna
107. Tail boom ladder
108. Cargo ramp
109. Cargo ramp supports
110. Hydraulic power cylinder of cargo ramp
111. Hydraulic pump handle of cargo ramp manual opening
112. Loading ramps in open position
113. Clamshell door in open position
114. Clamshell door in closed position
115. Emergency hatch on clamshell door
116. Clamshell doors opening device
117. Tail boom ramp
118. Tail boom
119. Tail boom door
120. Tail rotor drive shaft
121. Tail bearing support
122. Anti-collision light
123. Mechanism for transferring from TR pitch control
124. Altimeter antenna
125. Tail boom opening
126. Intermediate gear box
127. Retractable tail support
128. Communication radio antenna
129. Tail pylon
130. Fixed fin
131. Stabilizer
132. Ramp in tail pylon
133. Tail pylon opening to fixed fin
134. Tail gear box
135. Tail rotor hub system
136. Tail rotor pitch change rod
137. Tail rotor blade
138. Navigation light
139. Static-electricity discharger
140. IFF antenna





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A LARGE LIFTING CAPACITY, HIGH-PRECISION MOUNTING AND COMFORTABLE CREW  
WORKING CONDITIONS MAKE THE HELICOPTER IRREPLACEABLE DURING CONSTRUCTION-RIGGING  
WORK IN REMOTE AND INACCESSIBLE REGIONS



**TRANSPORTATION OF CARGO ON THE EXTERNAL SLING**

The Mi-26T helicopter is used for constructing bridges, the mounting and transportation of heavy industrial equipment, and the raising of rigs and electric power lines.

The helicopter can be fitted with a side external Operator's cabin and modernised external sling with central cable.





## FIRE-FIGHTING

The firefighting version of the Mi-26T with VSU-15A water discharge system on the external sling is designed for:

- Extinguishing and containing of fires in tundra, steppe, forest-steppe, forest and mountainous areas
- Extinguishing and containing of industrial and domestic fires
- Delivery of mobile fire-fighting units, wheeled and non-wheeled vehicles as well as fire-fighters, to remote and inaccessible regions.

The VSU-15A water discharge system on the external sling enables the intake of water for extinguishing fire, in hover mode, from any reservoir, lake or area of shallow water.

Water intake and discharge are controlled remotely from the operator's control panel. When required, the VSU-15A can be disconnected and the helicopter can be used for transportation of materiel and bulky cargoes.

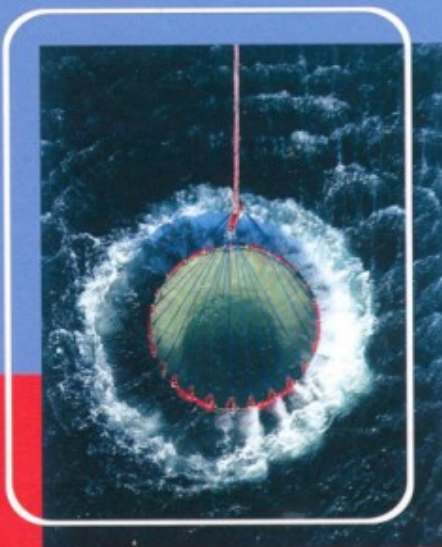
Fire-fighting complex includes:

- VSU-15A water discharging device
- External sling, providing transportation of VSU-15A, and water intake and discharge control
- Means of crew's radio communication with ground fire divisions.



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OPERATIONAL EXPERIENCE OF THE MI-26T HAS SHOWN THAT DURING FIREFIGHTING OPERATIONS, IT IS 70 PERCENT MORE EFFICIENT THAN LIGHT AND MEDIUM HELICOPTERS



## REFUELLER

The Refueller is designed for the transportation of different types of fuel (kerosene and diesel) and lubricants. The onboard equipment allows for autonomous refuelling both of aircraft and ground equipment. The modular equipment consists of two carts complete with fuel tanks, pumping equipment, control panels, distribution hoses and fuel transfer counters.



The refuelling tanks intended for transportation of avgas can also be used as extra fuel tanks to increase the helicopters ferry range. The onboard refuelling equipment installed in the helicopter's cargo cabin is available in two versions:

- Avgas
- Diesel



The Mi-26T Refueller has the same performance as the basic helicopter. Capacity of transported fuel - 14,040 l.





**MI-26T HELICOPTER WITH UP-TO-DATE AIRBORNE RADIO-ELECTRONIC SYSTEM (BREO) BREO SYSTEM COMPONENTS:**

- Additional automatic control system (SAU) preserving the existing 4-channel auto-pilot system
- Helicopter operational status and equipment operating time monitoring system
- Integrated navigation, flight planning and communication system
- Precise automatic hovering control system
- Map display system
- Electronic display system (five multifunctional colour displays)
- Night vision goggles (NVG)
- Interior and exterior lights adapted to night vision goggles

The capabilities of the integrated radio-electronic systems, operational status and operating time monitoring systems allows for reduction in crew numbers to two to three persons.

Crew members:

- First Pilot- Captain
- Second Pilot- Navigator
- Flight Mechanic - External Sling Operator (if required).

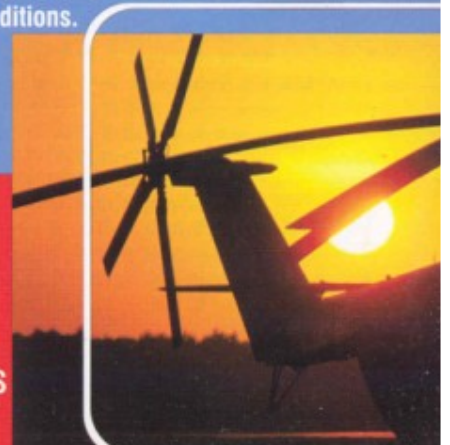
Introduction of BREO systems results in:

- Reduced operating costs due to reduction in crew numbers
- Enhanced reliability and flight safety
- Improved helicopter performance
- Improved helicopter stability and controllability plus precision hovering ability when undertaking delicate operations
- Meeting required safety standards for civil airline use
- Permitting H24 flights and in all-weather conditions
- Enabling flights over sea and ocean
- Reduction in maximum weight
- Flight planning and in-flight changes to the flight plan
- Reducing the crew's flight plan time processing time prior to flight
- Reducing crew workload in flight (automatic monitoring of airborne systems critical parameters)
- Improvements to cabin ergonomics and, as a result, the crew's working conditions.



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**THE CAPABILITIES OF THE INTEGRATED RADIO-ELECTRONIC SYSTEMS,  
OPERATIONAL STATUS AND OPERATING TIME MONITORING SYSTEMS  
ALLOW FOR THE REDUCTION IN CREW NUMBERS TO TWO TO THREE PERSONS**



## MI-26T MAIN TECHNICAL DATA



Engine .....	D-136
Power, h.p. ....	2x11,400
Take-off weight, kg	
• Normal .....	49,600
• Maximum .....	56,000
Empty weight, kg .....	29,000
Speed, km/h	
• Maximum .....	295
• Cruise .....	255
Lifting capacity, kg	
• Inside the cargo cabin.....	20,000
• On the external sling .....	20,000

Ceiling, m	
Hovering, OGE at ISA and normal take-off weight (min) .....	1,700
Service (min) .....	4,600
Range, km	
• Without extra tanks .....	590
• With 4 extra tanks .....	1,923
Cargo cabin dimensions:	
• Length, m .....	12.1
• Width, m .....	3.29
• Height, m .....	3.17

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# MI-26



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