

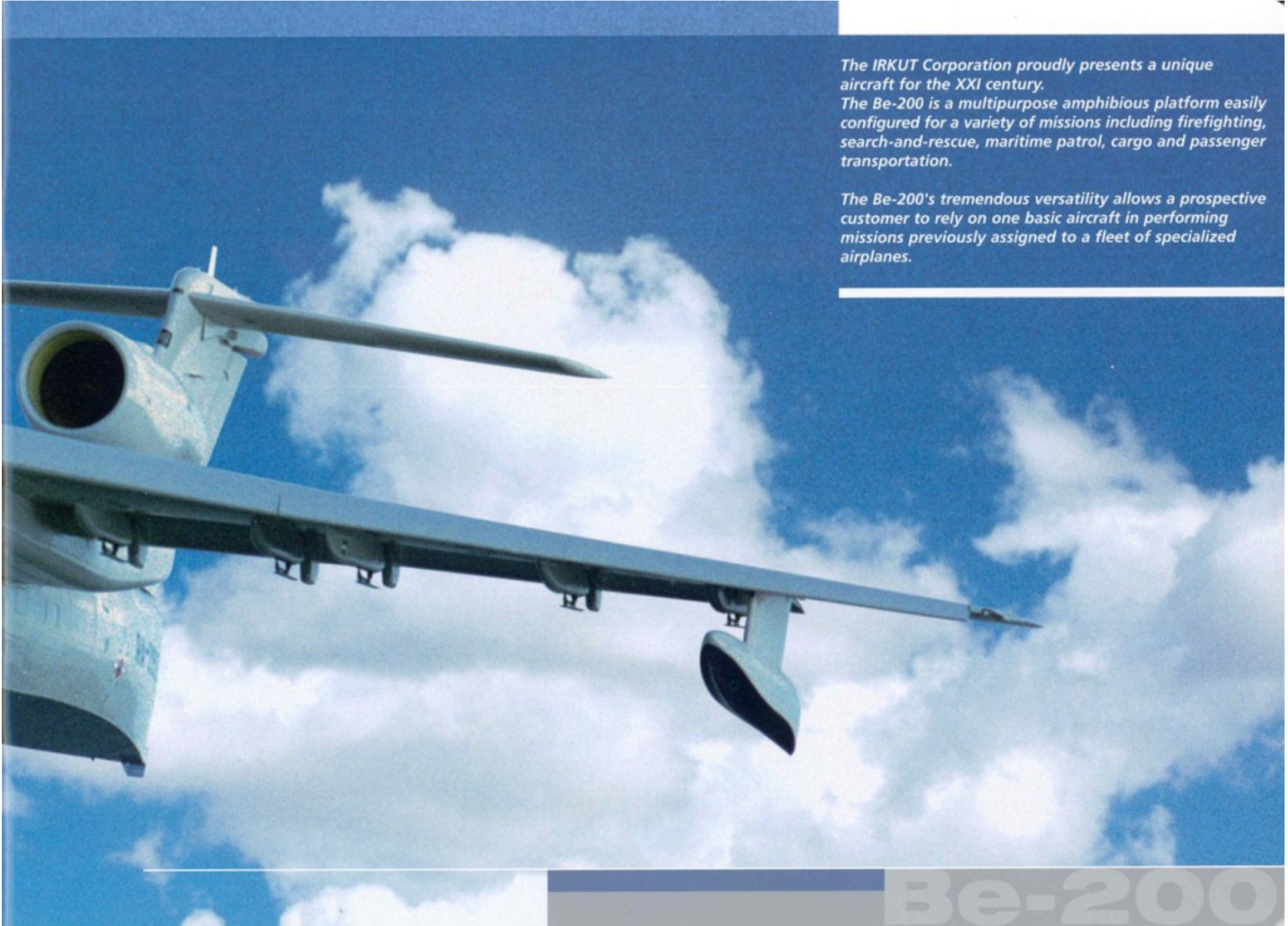
# Be-200

MULTIPURPOSE AMPHIBIOUS JET



AERIAL FIREFIGHTING ★ SEARCH & RESCUE ★ MARITIME PATROL ★ MEDEVAC ★ PASSENGER & CARGO ★ AERIAL FIREFIGHTING ★ SEARCH & RESCUE ★ MARITIME PATROL ★ MEDEVAC ★ PASSENGER & CARGO





*The IRKUT Corporation proudly presents a unique aircraft for the XXI century.*

*The Be-200 is a multipurpose amphibious platform easily configured for a variety of missions including firefighting, search-and-rescue, maritime patrol, cargo and passenger transportation.*

*The Be-200's tremendous versatility allows a prospective customer to rely on one basic aircraft in performing missions previously assigned to a fleet of specialized airplanes.*

**Be-200**

*The Be-200 represents the latest achievement in Russia's long history of seaplane development.*



Be-200 (1998), A-40 (1986), Be-12P (1992)

# HYDROAVIATION REVIVAL

**A**mphibian aircraft ruled the ocean skies in the first half of the XX century. Seaplanes were the first aircraft to perform transoceanic passenger flights. They flew postal missions to Pacific islands, delivered cargos to Africa and helped to explore the vast areas of Siberia and the Far East. With their unique ability to operate on water, amphibious aircraft routinely performed tasks conventional aircraft were not suited for.

In Russia, the Beriev Aircraft Company (currently, the affiliate of the IRKUT Corporation) has been developing leading-edge amphibians for nearly 75 years.

The Beriev's designers have created amphibians of more than twenty types, such as the MBR-2 short-range naval reconnaissance aircraft, Be-6 flying boat, Be-10 sea jet, Be-12 amphibian, and many others.

By late 1950s, the advent of jet aircraft signalled the end of the amphibian's prominent role in aviation. Meanwhile, with subsequent introduction of new design principles, amphibians were once again in a position to exploit their inherent advantages over conventional aircraft at high seas and coastal areas.

In 1990s, The Beriev's design expertise and experience have paid off tremendously in development of the Be-200 jet.

With a number of innovative design solutions and modern materials used in this plane, the Be-200 has epitomised the world's only multipurpose amphibious aircraft, capable of replacing an entire fleet of specialised aerial platforms, at a fraction of the cost.

MBR-2 (1932)



KOR-1 (1936)



Be-8 (1947)



Be-12 (1960)



Be-6 (1948)



*The Be-200 is a versatile platform, easily convertible for a variety of missions, including firefighting, search-and-rescue, maritime patrol, disaster relief, environmental monitoring, medical evacuation, and passenger/cargo transportation.*



## A MULTIPURPOSE CONVERTIBLE



**W**hether facing natural disasters or man-made catastrophes, the international community is in critical need of a multipurpose disaster relief system on the ground and at sea. The high-speed, heavy-lift Be-200 jet features remarkable operational capabilities making this aircraft the key component of such a system.



Designed as a truly multipurpose platform, the Be-200 is an indispensable asset for evacuating people from earthquake- or tsunami-ravaged coastal areas, extinguishing fires, and delivering medical teams and primary necessities to disaster areas.

As a versatile base platform, the Be-200 can be converted from one variant to another for various missions with minimal efforts in a short time.


Equipped with state-of-the-art avionics and communications, the Be-200 can perform prolonged flights over vast bodies of water lacking visual reference points, and land on unequipped water basins.

The highly effective power plant with auxiliary power unit also contributes to Be-200's ability to operate autonomously, far from its home base.

The aircraft can be optionally fitted with equipment for detection and isolation of leaked or spilled pollutants, or with systems for aerial chemical/biological treatment of crops.

The onboard thermal imaging equipment ensures detection of the fire site and provides real-time video monitoring to evaluate firefighting effectiveness.



A Be-200 amphibious aircraft is shown landing on a body of water. The aircraft is white with red and blue stripes along the fuselage and on the floats. It has two large engines mounted on the wings. The aircraft is tilted upwards as it lands, creating a large splash of white water. The background consists of a dense, green forested hillside under a clear blue sky.

*The Be-200 is a littoral and blue water capable amphibian combining outstanding maritime characteristics with flight capabilities of conventional aircraft.*



## BASE PLATFORM

Conceived for littoral and blue water operations, the Be-200 amphibian features impressive maritime characteristics, such as robust design, remarkable water-surface take-off and landing capabilities, sufficient buoyancy and seaworthiness. Moreover, perfected aerodynamics makes the Be-200's flight characteristics similar to those of conventional aircraft.

A number of anti-corrosion precautions have been taken to protect the aircraft against the caustic effects of seawater. They include use of advanced corrosion-resistant materials, galvanic and lacquer coatings, as well as some chemical protection methods. As a result, the Be-200 features durability and assigned lifetime typical of similar conventional aircraft.

### AIRFRAME

The airframe is composed of modern materials such as aluminum-lithium and titanium alloys, high-strength steels, and polymer composites.

The Be-200 features the standard aerodynamic configuration of a high-wing T-tail monoplane with a high aspect ratio hull and variable lateral deadrise angle.

Two engines are mounted above the wing root pods on the landing gear fairings to prevent water spraying into the engines during water-surface take-off and landing.

The airframe is structurally designed with the minimal number of maintenance joints.



# BASE PLATFORM



## WINGS and CONTROLS

The supercritical wing is fitted with efficient high lift devices (slats, flaps, spoilers, and airbrakes) to ensure excellent manoeuvrability and take-off/landing performance.

The fly-by-wire system enhances the operational capabilities by providing easy handling to pilots while performing challenging missions.

To protect flaps from possible damage by water sprays during take-off, the Be-200 is fitted with an automatic full flap extension system that extends flaps to the take-off position only after the aircraft has accelerated to 180 km/h (97 kt), when hull-caused water sprays are less intense. This technical solution sufficiently reduces Be-200's take-off distance, enabling operation from small-size water basins. Aerodynamically profiled wings reduce induced drag during all flight stages.

The water rudder provides impressive manoeuvrability on water.



## FUSELAGE

The airplane's slim fuselage ensures excellent stability on water during take-off and landing, with hydrodynamically perfect hull streamlines minimising water resistance during take-off.

Being the only amphibian in hydroaviation history with a completely pressurized cabin, the Be-200 provides for passenger transportation at altitudes up to 8,000 m (26,246 ft).

A spacious starboard cargo door in the fore fuselage allows for loading standard pallets or containers, as well as lifeboat deployment. The port side incorporates fore and aft doors, the former fitted with a retractable ladder.



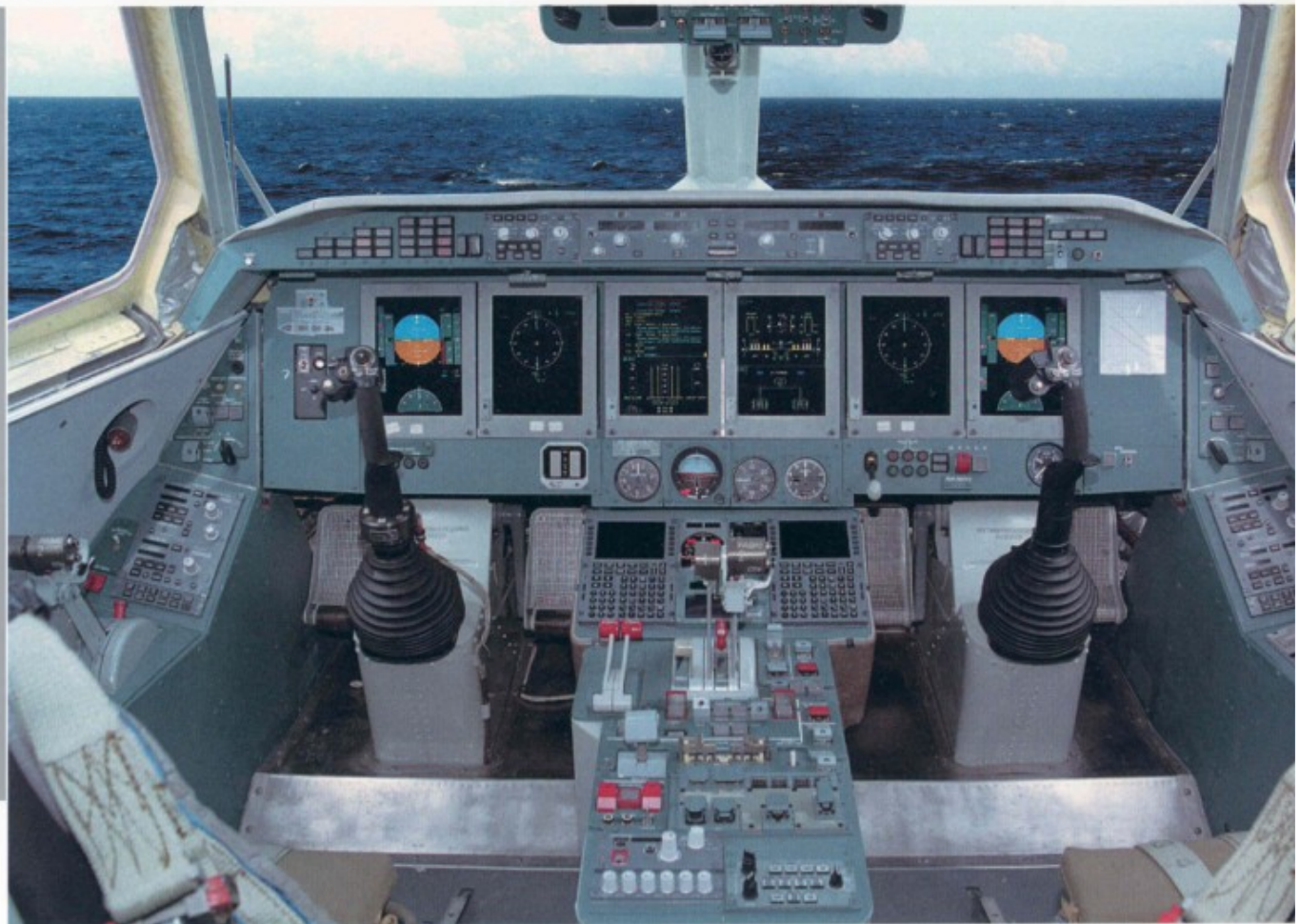


## COCKPIT

Featuring an advanced flight-and-navigation system and built-in automated test equipment, the Be-200 is designed for a crew of two.

The onboard avionics suite allows the crew to fly the aircraft and implement specific amphibious tasks during firefighting in automatic mode, such as approach to the fire site, approach to the water scooping area, landing approach to 60-m altitude, detection of aircraft's position during group operation in low visibility conditions, and others. Six multifunction LCDs installed in the cockpit provide the pilots with the consistent flow of data to ease piloting, navigation, mission employment, and in-flight diagnostics.

The cockpit is fitted with control sticks rather than conventional control columns to facilitate flight control and manoeuvring at turbulent air environment over the fire site and in mountainous terrain.



## BASE PLATFORM



### LANDING GEAR

The robust tricycle landing gear comprises a twin-wheel nose unit and two twin-wheel main legs made of titanium material. The nose leg retracts to the fuselage well, whereas the main legs retract to lateral wheel wells in the wing root. Due to improved pneumatics, the aircraft can exit water onto concrete ramps.





Be-200

### BASIC CHARACTERISTICS

### Be-200

Wing span	32.78 m (107 ft 6 in)
Length	32.05 m (105 ft 1 in)
Height	8.90 m (29 ft 2 in)
Wing area	117.44 sq. m (1,262 sq. ft)
Engines	2 x D-436TP
Maximum take-off weight	
runway	41,000 kg (90,389 lb)
water	37,900 kg (83,555 lb)
Maximum take-off weight after scooping	43,000 kg (94,799 lb)
Maximum landing weight	
runway	35,000 kg (77,161 lb)
water	37,900 kg (83,554 lb)
Fuel capacity	16,130 l (4,261 US gal)
Water tanks capacity	12,000 l (3,170 US gal)
Cargo cabin capacity	80.8 cu. m (2,853.4 cu. ft)
Maximum cargo payload	5,000 kg (11,000 lb)
Passengers	up to 68
Maximum cruise speed	680 km/h (367 kt)
Economy cruise speed	550 km/h (297 kt)
Service ceiling	8,100 m (26,600 ft)
Maximum range with 5-t payload and 1-h fuel reserve	1,550 km (837 nm)
Maximum range	3,150 km (1,701 nm)
Take-off distance to clear 10.7-m (35-ft) obstacle:	
runway	1,350 m (4,167 ft)
water	1,600 m (5,249 ft)
Landing distance from 15-m (50-ft) altitude:	
runway	1,050 m (3,346 ft)
water	1,300 m (4,265 ft)
Seaworthiness, Sea State	3
Maximum wave height	1.2 m (3 ft 11 in)
Crew	2 persons

## BASE PLATFORM



### POWER PLANT

Two D-436TP engines constitute the core of the Be-200's power plant. Developed by the Zaporozhye-based Progress Machine-Building Design Bureau, this three-rotor modular engine is produced by the Ukrainian Motor Sich Enterprise. The engine has a high gas-dynamic stability reserve and offers guaranteed ground start-up in the temperature range of -40 to +50°C and mid-flight start-up at altitudes of up to 8,000 m (26,246 ft).

The engine incorporates a three-stage axial-flow compressor consisting of a supersonic fan with a booster stage, a transonic six-stage low-pressure compressor, and a subsonic seven-stage high-pressure compressor.

The turbine module incorporates a single-stage axial-flow high/low pressure turbine and a triple-stage fan turbine. Cooled turbine blades are covered with heat-resistant coating to ensure required parameters during prolonged operation. The turbine is designed to keep the turbine module operational within designated parameters during the aircraft's assigned lifetime.

The D-436TP engines are fitted with an automatic control system for start-up and steady modes. This system monitors twenty five major operational parameters and provides the crew with the current values of engine-related parameters and their dynamics, thus enabling the crew to continually monitor engines' operating conditions.



The D-436TP engine is fully compliant with the ICAO Chapter 4 requirements.

Low specific fuel consumption at all flight stages contributes to cost-effective employment of the aircraft.

The power plant incorporates a TA-12-60 auxiliary power unit to provide autonomous electric power for onboard systems and to keep the onboard climatic system running while the aircraft is parked and main power plant is switched off.

### D-436TP take-off parameters (H=0, M=0, ISA +15°C)

Thrust	7,650 kgf (16,865 lb)
Specific fuel consumption	0.370
Dry weight	1,450 kg (3,197 lb)



Be-200

# BASE PLATFORM

## AVIONICS

The Be-200 is fitted with the state-of-the-art ARIA-200M integrated flight-navigation-communications suite, which ensures reliable piloting and navigation in any weather, in any region of the world.

Introduction of advanced hardware and software solutions ("glass" cockpit, crate module design, and cutting-edge computers) facilitates piloting and enhances mission success. The ARIA-200M's open architecture leaves room for reconfiguring the system to fit customer's specific requirements.



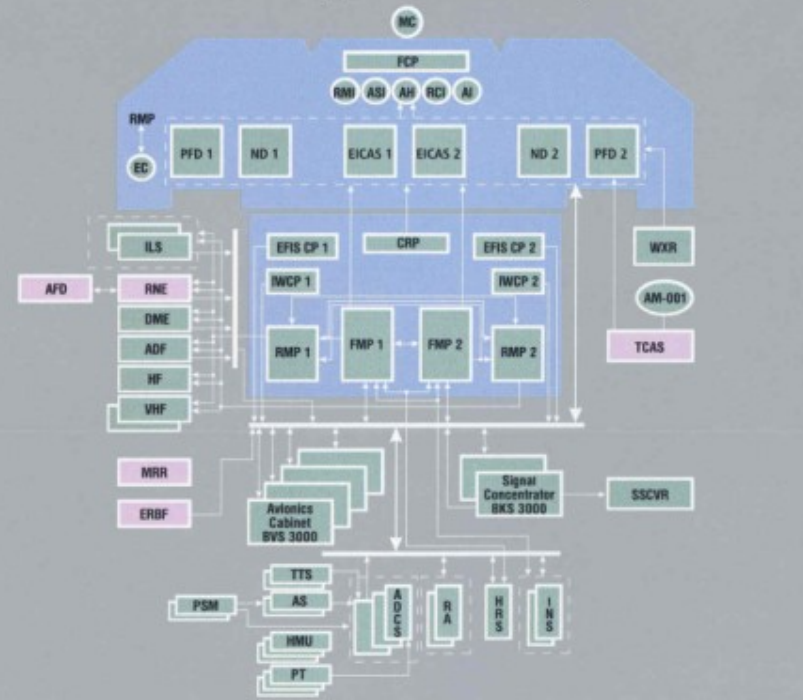
The ARIA-200M's advanced computing system, combined with the control-and-indication unit and the satellite navigation module, ensures optimised automatic piloting and navigation.

A comprehensive display system with six multifunction LCDs informs the crew of current status of flight-critical systems and equipment, provides flight and navigation data, and warns of equipment failure and/or malfunctions.

The attitude positioning of the aircraft is ensured by integrated processing of data fed from autonomous dead-reckoning devices, flight data systems, and data corrections refined by radio navigation and landing aids together with the satellite navigation system.

ARIA-200M also includes the weather radar system and radio communications.

ARIA-200M Integrated Avionics Block Diagram



- |  |   |  |   |
|--|---|--|---|
| PFD ..... Primary Flight Display                       | VHF ..... VHF radio station   | PSM ..... Power Supply Module          | TCAS ..... Transponder and TCAS Control Deck    |
| ND ..... Navigation Display                            | MRR ..... Marine Range Radio  | TTS ..... Total Temperature Sensor     | SSCVR ..... Memory Unit                         |
| EICAS ..... Engine Indication and Crew Alerting System | ERBF ..... Emergency Radio Beacon Finder                              | AS ..... Airflow-angle Sensor          | MC ..... Magnetic Compass                       |
| ILS ..... Instrumental Landing System                  | EFIS CP ..... Electronic Flight Instrument System Control Panel       | HMU ..... Heating Monitor Unit         | RMI ..... Radio Magnetic Indicator              |
| AFD ..... Antenna-feeder Device                        | RMP ..... Radio Management Panel                                      | PT ..... Pitot Tube                    | ASI ..... Air Speed Indicator                   |
| RNE ..... Radio short-range Navigation Equipment       | FMP ..... Flight Management Panel                                     | ADCS ..... Air Data Computer System    | AH ..... Artificial Horizon                     |
| DME ..... Distance Measuring Equipment                 | FCP ..... Flight Control Panel for autopilot and thrust control modes | RA ..... Radio Altimeter               | RCI ..... Rate-of-Climb Indicator               |
| ADF ..... Automatic Direction Finder                   | CRP ..... Contrast Regulation Panel                                   | HRS ..... Heading Reference System     | AI ..... Altitude Indicator                     |
| HF ..... HF radio station                              |   | INS ..... Integrated Navigation System | EC ..... Electric Chromometer                   |
|  |   | WXR ..... Weather Radar                | IWCP ..... Indication and Warning Control Panel |



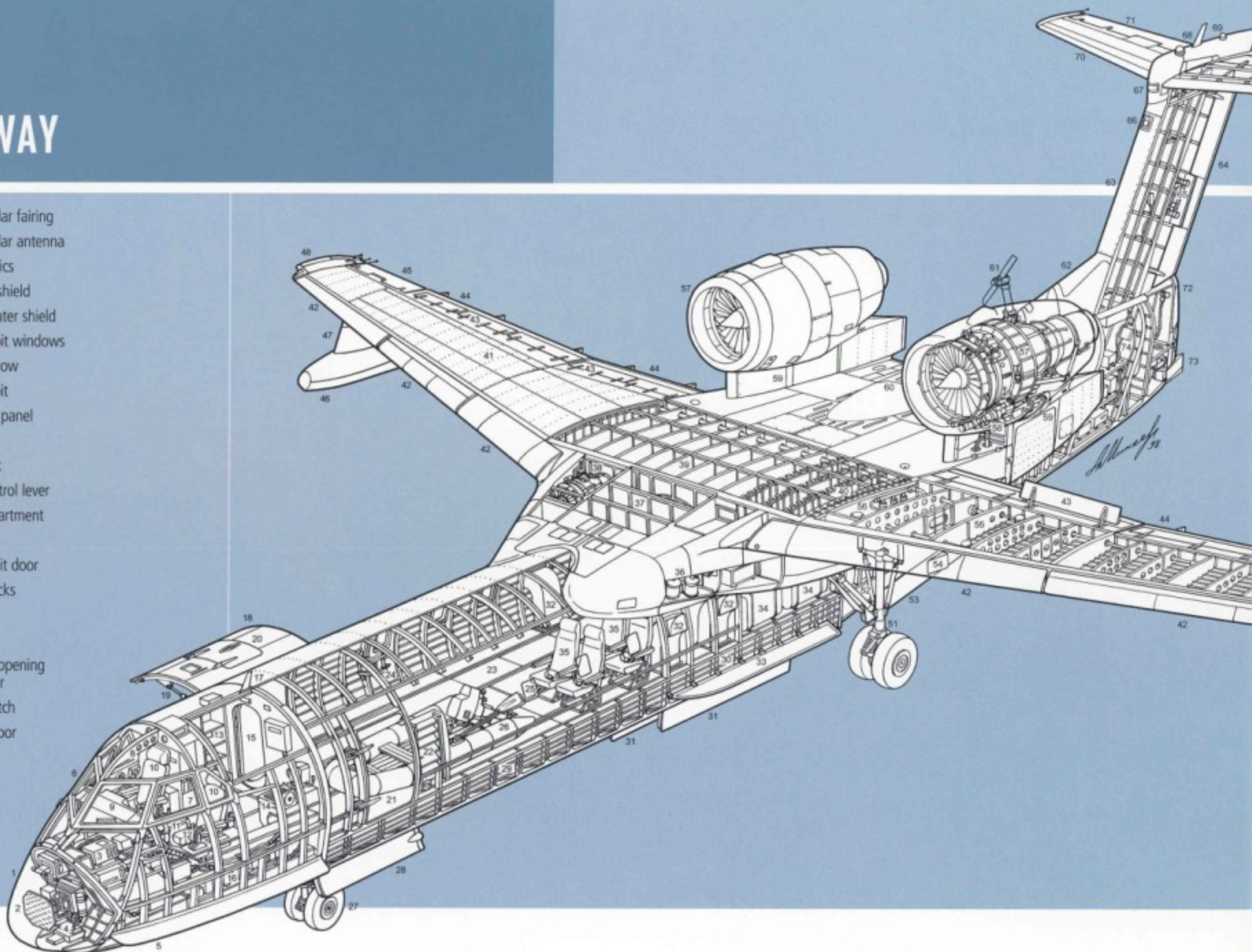
*The Be-200's avionics suite incorporates advanced hardware and software solutions to facilitate effective crew performance.*



**Be-200**

# CUTAWAY

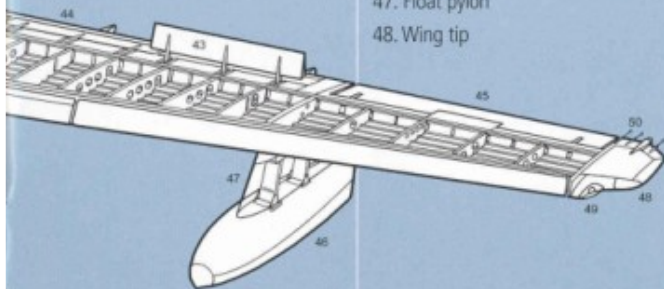
1. Weather radar fairing
2. Weather radar antenna
3. Radar avionics
4. Bow water shield
5. Fore side water shield
6. Pilot's cockpit windows
7. Sliding window
8. Pilot's cockpit
9. Instruments panel
10. Pilot's seats
11. Control stick
12. Engines control lever
13. Utility compartment
14. Kitchen
15. Pilot's cockpit door
16. Avionics blocks
17. Antenna
18. Cargo door
19. Cargo door opening hydrocylinder
20. Servicing hatch
21. Passenger door





- 22. Side-extending staircase
- 23. Cargo compartment
- 24. Emergency exit
- 25. Illuminators
- 26. Rescue lifeboat
- 27. Forward undercarriage leg
- 28. Forward undercarriage door
- 29. Watertight compartments
- 30. Fore water tanks group
- 31. Watertanks doors
- 32. Air vent pipe
- 33. Mid-hull spray deflector

- 34. Fire-retardant tanks
- 35. Rescue team seats
- 36. Fire-extinguishing system bottles
- 37. Wall
- 38. Auxiliary power unit
- 39. Centroplane
- 40. Strengthened attachment rib
- 41. Detachable wing part
- 42. Slat
- 43. Interceptor
- 44. Flap
- 45. Aileron
- 46. Float
- 47. Float pylon
- 48. Wing tip



- 49. Navigation light
- 50. Static electricity removers
- 51. Main landing gear leg
- 52. Main landing gear retraction cylinder
- 53. Water tanks doors
- 54. Hydrodynamic compensator
- 55. Fuel tank compartment
- 56. Fuel system elements
- 57. D-436TP turbofan
- 58. Engine's gearbox
- 59. Engine pylon
- 60. Deck hatch
- 61. Retractable auxiliary generator windmill
- 62. Forefin
- 63. Fin
- 64. Rudder
- 65. Servo drives
- 66. Taxi light
- 67. Antenna
- 68. Anticollision light
- 69. Water-in-compartment light
- 70. Tail stabilizer
- 71. Altitude control rudder
- 72. Tail fairing
- 73. Water rudder
- 74. Tail utility compartment





*The Be-200's deployment flexibility ensures effective operation from either water basins or Class B airfields.*

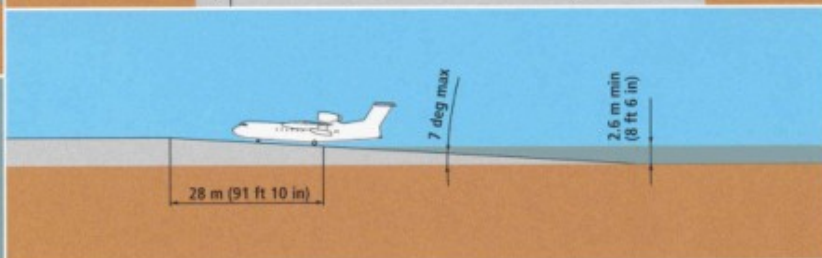
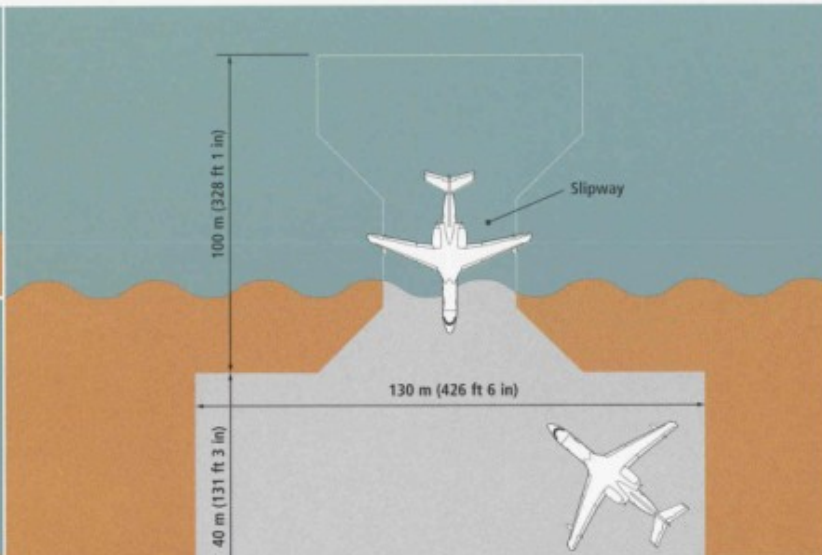
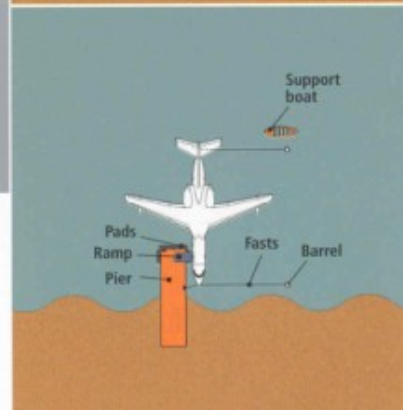
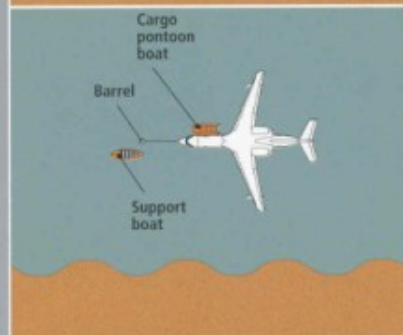
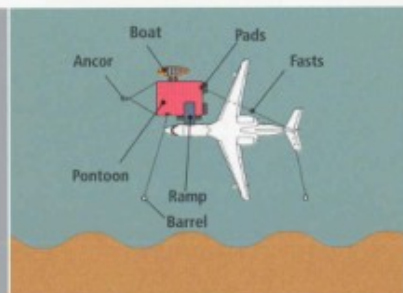
# DEPLOYMENT FLEXIBILITY


The Be-200 operates equally well from a Class B airfield with a runway of 1,800 m (5,906 ft) long, or an open water area not less than 2,300 m (7,654 ft) long and 2.6 m (8 ft 6 in) deep.

The Be-200 can take off from and land on water at waves up to 1.2 m (3 ft 11 in) high; it can taxi on water in Sea State 3, regardless of the wind direction.

Requiring only a 130x70-m (426x230-ft) paved area ashore with a concrete slope to the water surface for its deployment, the Be-200 is ideal for remote coastal areas lacking adequate ground facilities.

While sea-based, the amphibian can be moored to a floating barrel, a floating pontoon, or a standard pier.



A large amphibious aircraft, the Be-200, is shown from a front-quarter perspective on a body of water at night. The aircraft's four engines are visible, and its landing gear is partially submerged. Bright lights on the aircraft illuminate the water, creating strong reflections. The sky is dark, and the overall scene is dramatic and high-contrast.

*Combining advanced engineering  
with superb base platform features,  
the Be-200 has ushered in a new  
generation of amphibious aircraft  
customized for a wide range  
of applications.*

# EMPLOYMENT VERSATILITY

## FIREFIGHTING VERSION

The Be-200 is an amphibious air-tanker with water-scooping capability.

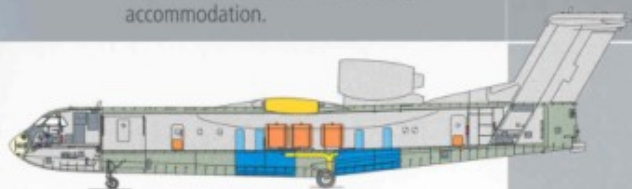
The aircraft can scoop water into eight water tanks while gliding on the water surface, or they can be filled with water or fire retardant from cistern or hydrant at the airfield. Water tanks are installed under the floor of the pressurised cargo cabin, thus providing ample room inside the cabin for the fire crew or cargo accommodation.

## SEARCH-AND-RESCUE VERSION

The Be-200 can perform prolonged search-and-rescue missions. At a distance of 370 km (200 nm) from base, the patrol time is 5.6 hours.

Additional equipment includes an inflatable boat, thermal vision and optical surveillance means, and medical equipment. The search-and-rescue aircraft can accommodate a rescue team of 45.

The aircraft can be converted for medical evacuation missions. In this case, it is capable of accommodating up to 30 stretcher casualties accompanied by medical personnel with medical emergency equipment.



# EMPLOYMENT VERSATILITY

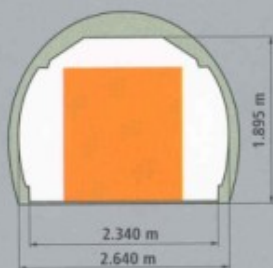
## TRANSPORT VERSIONS

### CARGO

The cargo version is fitted with floor-mounted freight handling equipment to expedite loading, unloading, and fastening of cargos in standard containers, on pallets, or in bulk. This ensures employment of the Be-200 for various airlift missions ranging from delivery of cargos to remote areas lacking developed transportation infrastructure to delivery of first-aid and emergency loads to calamity zones at a short notice.

#### Cargo cabin dimensions:

length	17.0 m (59 ft 9 in)
maximum width	2.640 m (8 ft 8 in)
width	2.340 m (7 ft 8 in)
height	1.895 m (6 ft 3 in)



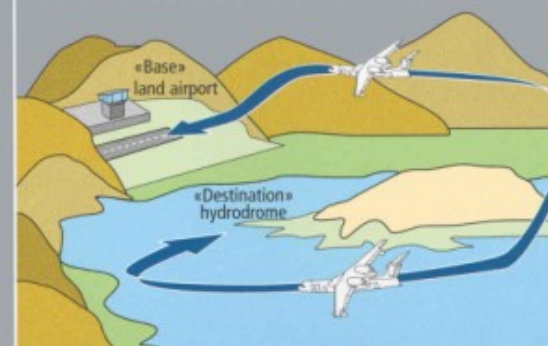
### PASSENGER

Be-200 unique amphibious characteristics permit new transport scheme of collecting passengers at a ground hub and delivering them to a remote area with landing on water.

The passenger version accommodates up to 68 seats. The crew is augmented by two flight attendants.

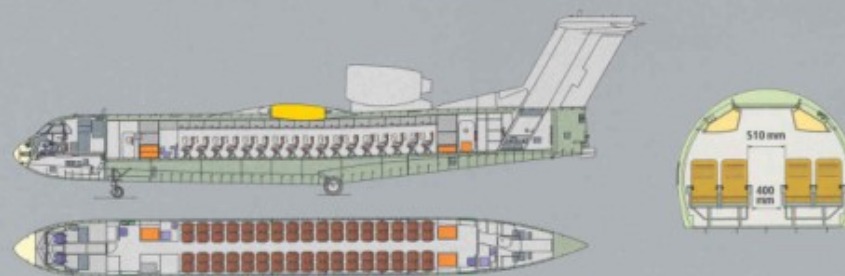
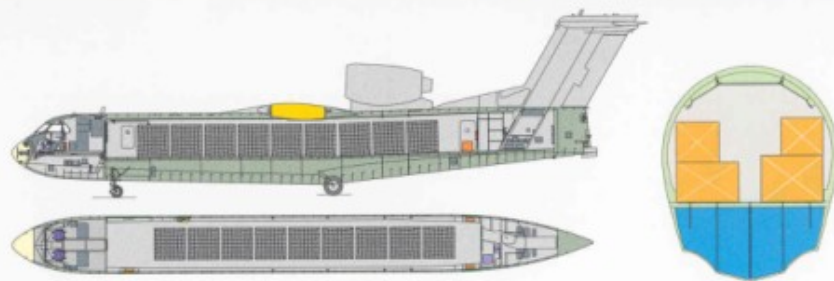
The Be-200 can be converted from cargo to passenger version within one hour, the approximate time required to mount the passenger seats.

If the aircraft is exclusively designated as a passenger carrier, a galley, wardrobe modules, and overhead baggage compartments will be installed.



### VIP

The 18-seat VIP configuration will feature a luxurious passenger cabin. Customized communications and audiovisual systems can be installed at customer's request.









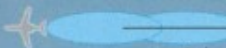

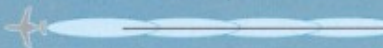
© EADS/Wallbed



Be-200

The Be-200 demonstrates excellent firefighting performance by extinguishing fire spots, or laying a protective strip by means of multiple drops of water or retardant.



	Drop options	Coverage area, sq. m	Coverage length x width, m
	Single salvo drop	1,390	80 x 30
	2 drops	2,615	145 x 30
	3 drops	3,450	225 x 26
	4 drops	4,460	276 x 26
	8 drops	5,324	551 x 16

© EADS/ Wotford

# FIREFIGHTER



**T**he Be-200 multipurpose aircraft is especially well suited for firefighting operations in remote areas.

The Be-200 fire-fighter suppresses natural and industrial fires by dropping water or chemical retardants carried in eight tanks located under the cargo cabin. Water or retardants can be dropped in a single salvo to cover a large fire spot, or in two to eight consecutive drops (pre-programmed from the cockpit) to put out several small fires and to prevent the fire from spreading.

In its spacious pressurised cargo cabin, the aircraft can also transport a fire-fighting team and their equipment to the fire zone.

## OPERATION FROM LAND BASES

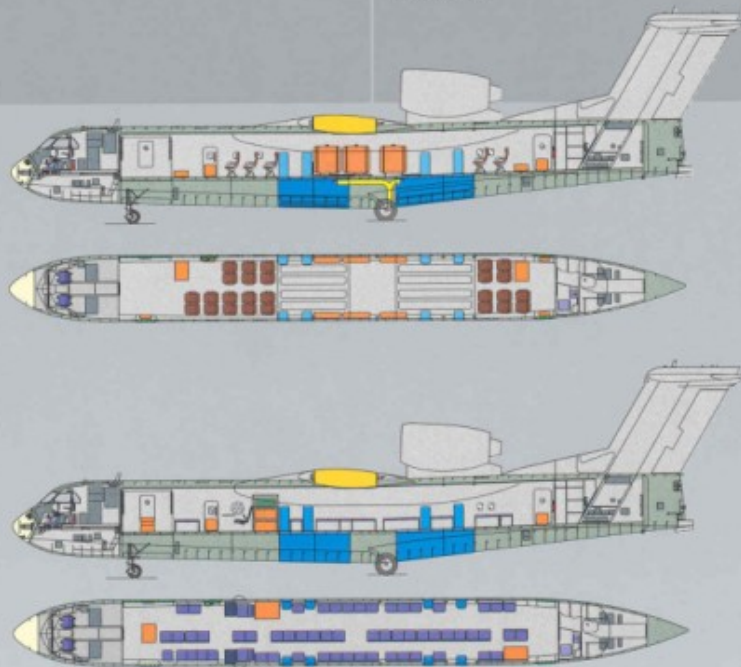
For firefighting operations from land bases the Be-200 carries up to 9 tons (2,378 US gal) of water or retardants filled through a single-point standard connector from a hydrant or a water cistern.

## WATER SCOOPING

While gliding on the water surface, the Be-200 scoops up to 12 tons of water in 18 seconds. The water tanks are filled through two symmetrical scoops located behind the front hull bottom step, where the maximum pressure of water flow occurs.

To avoid hydrodynamic shock induced by water scooping, the water tanks are vented through pressure balancing ducts.

The aircraft can be also equipped with auxiliary tanks for fire-retarding chemical agents, with a total capacity of up to 1.2 cubic meters (317 US gal). Radial flow pumps are used to mix the special foam-forming liquid with the water being dropped to enhance its firefighting effectiveness.



# FIREFIGHTER



## SHUTTLE TACTICS

As a true amphibian, the Be-200 enjoys significant operational flexibility advantage over conventional ground-based aircraft — the ability to perform continuous scoop-and-drop shuttle operations. The fully fuelled amphibian deploys from its base en route to the designated water basin, scoops water, and immediately proceeds to the site of the fire.

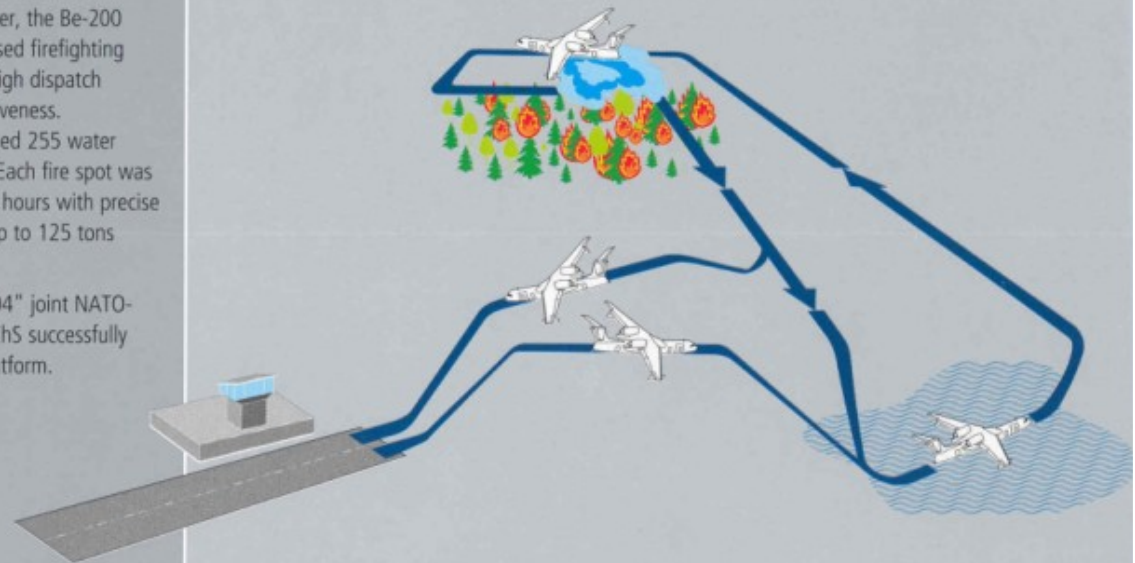
After dropping the water, the aircraft returns to the water basin and repeats the scoop-and-drop cycle.

The Be-200 firefighter outperforms its counterparts in terms of water volume scooped (12 tons in 18 seconds) and total water volume dropped per one refuelling (up to 240 tons). The aircraft can scoop water from any open water basin with a minimum depth of 2.6 m (8 ft 6 in) and a minimal length of 1,800 m (0.972 nm).

## OPERATIONAL SUCCESS

In 2004, the "SOREM" company, the major operator of the Civil Protection Department of Italy, employed the Be-200 amphibian to fight forest fires at the Sardinia island. Operated by the joint crew of Russian and Italian pilots, trained and certified at the Beriev's Training Center, the Be-200 has demonstrated unsurpassed firefighting capabilities, together with high dispatch reliability and rapid responsiveness. In total, the Be-200 performed 255 water scoops from lakes and sea. Each fire spot was suppressed in less than two hours with precise and sufficient dropping of up to 125 tons of water.

During the "Kaliningrad-2004" joint NATO-Russia Exercise the Be-200ChS successfully suppressed fire at the oil platform.



*The Be-200's ability to carry out water scoop-and-drop shuttling makes it second to none in the realm of amphibious firefighting.*



© "Military Parade"

Be-200

*The Be-200's unique capabilities make this aircraft an ideal asset for the rapid reaction aviation squadron of any national or international disaster relief agency.*



# RAPID RESPONSE



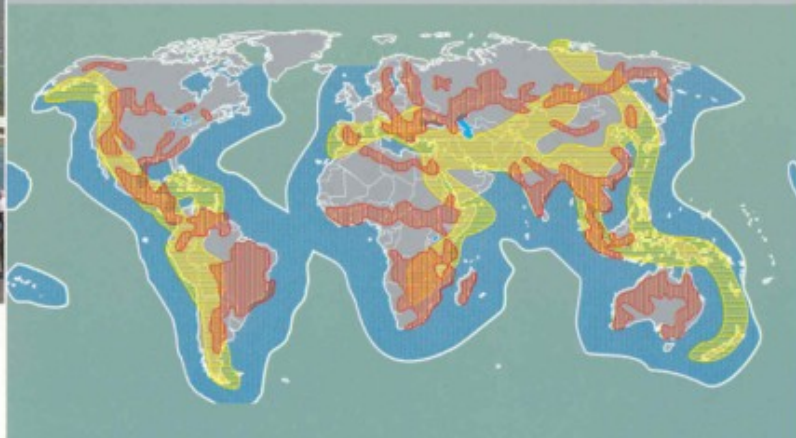
The Be-200 is a versatile amphibious platform demonstrating multifunctionality, impressive flight and maritime performance, long operational range, redeployment flexibility, convertibility, as well as relative simplicity of basing and maintenance. These impressive features make the Be-200 a prime candidate to become the core aviation asset of a prospective rapid reaction force responding to large-scale fires and other calamities, effectively reducing the associated human and economic costs.

Seven to eight rapid response centres, equipped with Be-200 amphibians and linked by a global communications-and-warning network, could constitute an international system to rescue lives both on the ground and in littoral and blue-water areas around the world.

A squadron of 55 to 60 modern firefighting aircraft would constitute a sufficient force to combat forest fires in Russia.



Fires threats
  Earthquakes threats
  Rescue reach 970 nm



*The amphibian's ability to deploy almost everywhere makes it the best option for countries lacking conventional air transportation infrastructure.*



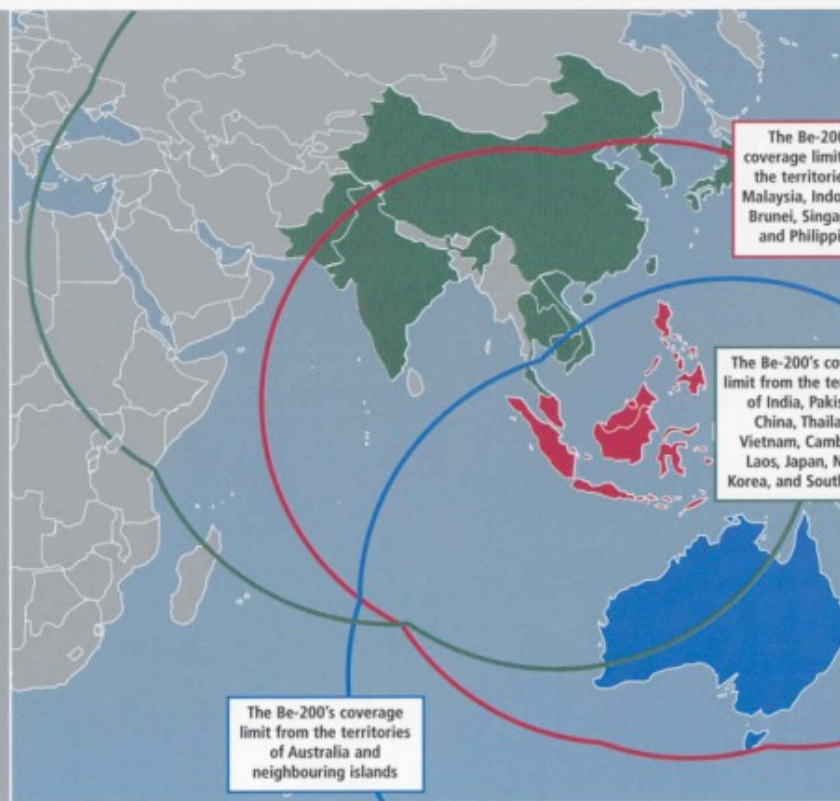


# OPERATIONAL ADAPTABILITY



The Be-200's efficiency is greatly enhanced in regions rich in water basins or in littoral and island areas, such as South-East Asia and the Pacific Rim.

While air transportation services are in great demand in these regions, construction costs for new airfields are often too prohibitive for the local economies to sustain. In such cases, the Be-200's versatility makes it an ideal solution for a variety of daily applications, such as tourist flights, transportation of shift workers to the sea oil platforms, urgent cargo deliveries, firefighting and search-and-rescue missions, as well as environmental monitoring of land and sea areas.



The Be-200's coverage limit from the territories of Malaysia, Indonesia, Brunei, Singapore, and Philippines

The Be-200's coverage limit from the territories of India, Pakistan, China, Thailand, Vietnam, Cambodia, Laos, Japan, North Korea, and South Korea

The Be-200's coverage limit from the territories of Australia and neighbouring islands





*The Be-200 project is the first major venture in the recent history of Russia's aviation industry to incorporate market-oriented technologies and new co-operation principles.*

# THE TEAM FOR SUCCESS



## DESIGN

The Be-200 was created by the Taganrog-based Beriev Aircraft Company, the world's leading designer of amphibious aircraft. The Be-200 design team has capitalised on the vast experience and innovations accumulated in the A-40 ALBATROSS, the largest amphibious jet ever built, with 148 world records in its logbook.

## MANUFACTURING

The Be-200 prototype and production aircraft are assembled by the IRKUT Corporation, one of Russia's major aircraft manufacturers, with production facilities certified for ISO-9001 requirements.

The first Be-200 prototype performed its maiden flight on 24 September 1998.

The second flying prototype, designated the Be-200ChS, was completed in July 2002. Configured for search-and-rescue, disaster relief, and firefighting missions, this aircraft is fully suited for operational needs of the Russia's Ministry for Emergencies.

The IRKUT Corporation is currently manufacturing seven Be-200 aircraft in firefighting and disaster relief configurations for the Russia's Ministry for Emergencies, with the first production Be-200ChS delivered to the Customer on 26 July 2003.

## AFTER-SALES SUPPORT

The IRKUT Corporation, jointly with the Be-200's engine manufacturers and onboard equipment suppliers, offers a full range of after-sales support, including flight and maintenance training, spare parts supply, guarantee service, and post-guarantee maintenance and support to ensure safe, continuous and cost-effective Be-200's operation.

A special training centre for flight crews and maintenance personnel has been already established at the Beriev Aircraft Company in Taganrog, Russia. This company has obtained the State Certificate enabling training pilots and maintenance personnel to operate the amphibian. The pilot training program includes training exercises in modern simulators, as well as a practical flying course at Beriev's hydroplane test facility, with the company's top test pilots employed as flight instructors. Several flight and maintenance crews of the Russia's Ministry for Emergencies have completed the training course in accordance with this program.





*The Be-200 firefighter successfully passed the certification process in 2001. The Full Type Certificate was awarded to the Be-200ChS aircraft in 2003.*

# TESTING AND CERTIFICATION

The Be-200 was initially designed to comply with the AP-25 Russian Aviation Rules and the FAR-25/JAR-25 Airworthiness Regulations. The aircraft's certification basis contains additional hydroplane-specific sections regarding specialized maritime equipment and specific maritime operation issues.

In August 2001, the aircraft was awarded a Type Certificate of Restricted Category enabling it to carry out firefighting missions.

In April 2003, the Be-200ChS was noise certified for operations in Europe.

In June 2003, the Be-200ChS was awarded a Type Certificate of Restricted Category, permitting employment by the Russia's Ministry for Emergencies.

After completion of the thorough testing programme in December 2003, the Be-200ChS was awarded a Full Type Certificate for multipurpose employment.

In August 2002, the Be-200 underwent test flights at Gyumri airfield, Armenia, located at a 1,580-m (5,184-ft) altitude above sea level, in order to evaluate flight and operational performance in high-temperature/high-altitude conditions of mountainous terrain. The 25-h flight programme included water-scoop/water-drop procedures on Lake Sevan located at a 1,950-m (6,397-ft) altitude above sea level, and several single-engine high-land take-offs. Those tests confirmed the Be-200's ability to operate reliably in adverse conditions.

Representing a unique achievement in hydroaviation development, the Be-200 holds 24 world records in categories C-2 (hydroplanes) and C-3 (amphibious aircraft).



## Why Choose Be-200?

*Be-200 is a littoral and blue water capable amphibian combining outstanding maritime characteristics with flight capabilities of conventional aircraft.*

*Be-200's avionics suite incorporates advanced hardware and software solutions facilitating effective crew performance.*

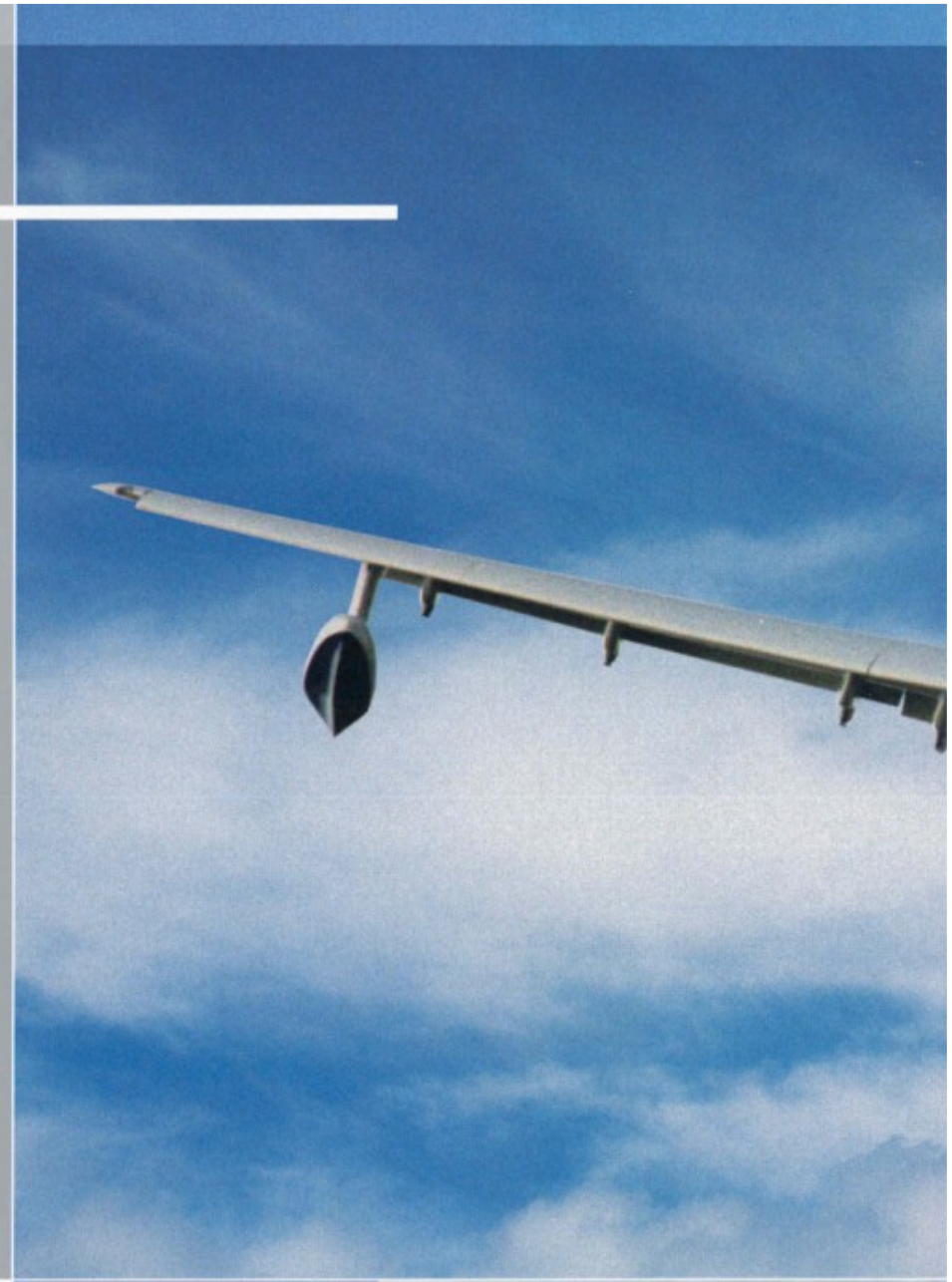
*Be-200 is a versatile baseline platform that can be easily converted for a variety of missions ranging from firefighting, search-and-rescue, maritime patrol and environmental monitoring, to medical evacuation, passenger and cargo transportation.*

*Be-200 features unique operational flexibility and is capable of operating from either Class B airfields or water basins.*

*Be-200 firefighter outperforms its counterparts in terms of water volume scooped (12 tons within 18 seconds) and total water volume dropped per one refuelling (up to 240 tons).*

*Be-200's ICAO Chapter 4-compliant D-436TP turbofans make this aircraft extremely cost-effective due to low specific fuel consumption in the entire flight envelope.*

*Be-200's unique capabilities make this aircraft an excellent core asset for the rapid response aviation squadron of any national or international disaster relief agency.*





## **IRKUT Corporation**

68, Bldg. 1, Leningradsky avenue,  
P.O. Box 88, Moscow, 125315, Russia  
Phone/Fax: (+7 095) 777 21 01  
E-mail: [inbox@irkut.com](mailto:inbox@irkut.com)  
[www.irkut.com](http://www.irkut.com)

Exclusive  
Representative in  
Greece

## **Scorpion International Services S.A.**



10, Panepistimiou str., 10671 Athens, Greece  
Phone: (+3 0210) 3616503-5, Fax: (+3 0210) 3616514  
E-mail: [scorpion@scorpion.com.gr](mailto:scorpion@scorpion.com.gr)  
[www.scorpion.com.gr](http://www.scorpion.com.gr)





# Be-200

*A unique combination of cutting-edge design solutions and advanced technologies implemented in the new-generation Be-200 aircraft paves the way for a large-scale revival of amphibious aviation.*

*High cost-effectiveness together with unsurpassed versatility makes the Be-200 a competitive amphibious platform to serve the international community in saving lives, reducing property losses, and enhancing the transportation infrastructure in any region of the world.*

