Courtesy Translation

MINISTRY OF TRANSPORT OF THE RUSSIAN FEDERATION
FEDERAL AIR TRANSPORT AGENCY

TYPE CERTIFICATE DATA SHEET

№ FATA-01023A

Aircraft:

Boeing 737

Models:
- Boeing 737-700
- Boeing 737-800
- Boeing 737-900ER
- Boeing 737-8

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Section 1. Boeing 737-700

1.1. Developer and Manufacturer

THE BOEING COMPANY
1901 Oakesdale Ave SW Renton, WA 98057-2623

1.2. Brief Aircraft Description

Transport category passenger airplane

1.3. Initial Certification

Type Certificate № CT148-B737-700 issued by IAC AR on 19.12.1997

1.4. Certification Basis

Aviation Regulations, Part 25 (AP-25) «Airworthiness requirements for transport category airplanes», Amendments 1 -3.
Aviation Regulations, Part 36 (AP-36) «Aircraft External Noise Certification».
Annex 16 ICAO "Environmental Protection", Volume 1, "Aircraft Noise"

1.5. Type Design Definition

FATA Type Certificate № FATA-01023A is applicable to Boeing 737-700, which Type Design is defined by:

1. FAA Type Certificate Data Sheet № A16WE;
2. Boeing Top Drawing 001A0001-700 as of 19 December 1997 and its subsequent revisions;
3. Boeing 737-700 operational documentation:
   - Airplane Flight Manual D631A001 with Airplane Flight Manual Supplement S1AR, approved by FAA;
   - Model 737 Maintenance Review Board Report, approved by FAA;
   - Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9, approved by FAA;
   - Weight and Balance Manual D043A570;
   - Flight Crew Operations Manual D6-27370-TBC;
   - Aircraft Maintenance Manual D633A101;
   - Master Minimum Equipment List (MMEL) Boeing 737, developed by FAA.

   Note: Master Minimum Equipment List (MMEL) developed by FAA for Boeing 737 is applicable with consideration of the operational requirements of the Russian Federation
4. Additions and changes to the type design in accordance with item 1.19 "Required Equipment" of this Data Sheet.

1.6. Engines

Two CFMI turbofan engines: CFM56-7B20, CFM56-7B22 or CFM56-7B24.

1.6.1. Engine Limits

For engines performance and operating limitations see Type Certificate Data Sheet № CT144-АМД and FAA-approved Boeing D631A001 Airplane Flight Manual.

1.7. Auxiliary Power Unit (APU)

Gas turbine engine 131-9 or 131-9B developed by Honeywell.

1.7.1. APU Limits

For APU performance and operating limitations see the FAA-approved Boeing D631A001 Airplane Flight Manual.

1.8. Fuel

Fuels Jet-A, Jet A-1, conforming to ASTM D-1655, are allowed for use without restrictions
Fuel PT is allowed for use without restrictions.
Fuel TC-1 is allowed for use in accordance with CFMI's Service Bulletin CFM56-7B S/B 73-0138, Revision 02, of December 20, 2010.
Fuel additives – in accordance with the CFMI's Service Bulletin CFM56-7B S/B 73-0138, Revision 02, of December 20, 2010.

1.9. Fuel Quantity See in FAA-approved Boeing D631A001 Airplane Flight Manual

1.10. Oil Quantity See in FAA-approved Boeing D631A001 Airplane Flight Manual

1.11. Minimum Flight Crew 2 pilots (captain and co-pilot)

1.12. Maximum Number of Passengers 149

1.13. Weight Limits

	kg	pound
Maximum taxi weight (MTW)	69626	153500
Maximum take-off weight (MTOW)	69399	153000
Maximum landing weight (MLW)	58059	128000
Maximum zero fuel weight (MZFW)	54657	120500

1.14. Maximum Baggage and Cargo Weight See in Boeing D043A570 Weight and Balance Manual.

1.15. Center of Gravity Range See in FAA-approved Boeing D631A001 Airplane Flight Manual

1.16. Maximum Operating Altitude 12497 m (41000 ft)

1.17. Airspeed Limits (IAS)

	Knots	Mach
V_{MO}/M_{MO} (maximum operating)	340	0,82
Other Airspeed limits are specified in Airplane Flight Manual Boeing D631A001 approved by FAA		

1.18. Airworthiness Limitations For certification maintenance requirements and life limits see the Boeing Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9 "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)".

Note: Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9 is applicable provided that Boeing monitors the actual operation of aircraft in the Russian Federation.

1.19. Required Equipment

1. The following equipment shall be installed on the airplane:
   - emergency voice recorder with recording duration not less than two hours and with capability of time recording;
   - EGPWS with the function of signaling the allowable operating bank angle;
   - TCAS-II;
   - One fixed automatic Emergency Locator Transmitter (ELT) VHF/UHF range functioning in the «КОСПАС-САРСАТ» system actuated automatically and manually from the cockpit and one portable Emergency Locator Transmitter (ELT) VHF/UHF range functioning in the «КОСПАС-САРСАТ» system
2. The aircraft shall have one 121.5 MHz emergency radio station located in an area that provides easy access and removability in the case of an emergency landing or ditching. It is the operator's responsibility to keep the radio station on board (if a Russian-made P-855A1 radio station is used, it is located in accordance with Boeing No. 232W4111 "Stowage Instl - Emergency Radio").

Note: Installation of an emergency radio station is not required if the portable emergency radio beacon has the function of an emergency radio station operating at 121.5 MHz.

3. The Altitude Alerting System shall have an internal 60 m (200 ft) threshold deviation alert function.
4. All inscriptions and stencils inside the aircraft related to emergency and safety equipment must be in two languages: English and Russian.
5. Aircraft shall not be equipped with VHF-700 range radio communication stations designed by Collins, drawing number 622-5219-XXX.

1.20. Aircraft Noise

Aircraft is approved for:

- Aviation Regulations, Part 36 (AP-36) «Aircraft External Noise Certification», Stage 3, and Chapter 3 of Annex 16 ICAO «Environmental Protection», Volume 1, «Aircraft Noise» in aerodynamic configuration with and without Winglets, provided that the modifications are implemented in accordance with the options specified in the table:

Engine model	Without Winglets	With Winglets
CFM56-7B20	97204	97204W
CFM56-7B22	97224	97224W
CFM56-7B24	9744	9744W

The noise levels established during the certification process are established in the FAA-approved Boeing D631A001 Airplane Flight Manual.

1.21. Operational Limitations

See in Boeing D631A001 Airplane Flight Manual, with Supplement to Airplane Flight Manual S1AR, in particular:

1. Operation is allowed at the ambient air temperature near the ground not lower than minus 50ºC and not higher than 50ºC.
   Note: At ambient air temperatures near the ground below minus 42ºC, the time spent on the ground between landing and takeoff is limited to 3 hours with mandatory parking procedures as specified in the Aircraft Maintenance Manual
2. The aircraft is certified for flight operations with a reduced vertical separation minimum (RVSM) of 300 m (1000 ft) between 290 and 410 levels.
3. The aircraft is approved for CAT IIIA automatic approach with a decision altitude of 15 m (50 ft).
4. The Boeing 737-700 type design reliability and performance were found capable of extended range operations (ETOPS) with maximum diversion time up to 180 minutes when operating and maintaining the aircraft in accordance with Boeing D044A007 "737-600/-700/-700C/-800/-900/-900ER ETOPS Configuration, Maintenance and Procedures".
   However, this finding does not exclude the need of operational approval for ETOPS flights for a specific operator.
5. For overwater flights, the aircraft must be equipped with liferafts. The number of liferafts, their capacity and location must meet the requirements of 25.1411(a)(b)(d) and 25.1415(a)(b)(c)(d) AP-25.

6. In order to perform ADF approach the aircraft shall be equipped with at least two automatic radio compasses or with one ADF with two frequency selectors.
7. Flights shall be allowed in the airspace where secondary ATC radar control is provided in RBS mode.

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1.22. List of approved STC (Supplemental Type Certificates)

№	STC Description	STC Holder	STC Number	Issued by
1	Winglet or Partial Wing Retrofit Installation	Aviation Partners Boeing, 2811 South 102nd Street, Suite 200, Seattle, WA 98168	ST00830SE	FAA
2	Installation of a CMC Electronics Class 3 Electronic Flight Bag (EFB) System [1)]	Electronic Cable Specialist Inc. 5300 W, Franklin Drive, Franklin, WI 53132	ST03007CH	FAA

Note:

The content of the electronic manuals and other information uploaded to the Electronic Flight Bag by the operator or at the operator's request is subject to approval in accordance with the procedure established by the aviation authorities of the state of operator.

Section 2. Boeing 737-800

2.1. Developer and Manufacturer

THE BOEING COMPANY
1901 Oakesdale Ave SW Renton, WA 98057-2623

2.2. Brief Aircraft Description

Transport category passenger airplane

2.3. Initial Certification

Type Certificate № CT169-B737-800 issued by IAC AR on 04.12.1998

2.4. Certification Basis

Aviation Regulations, Part 25 (AP-25) «Airworthiness Standards: Transport Category Airplanes», Amendments 1 -3.
Aviation Regulations, Part 36 (AR-36) «Aircraft External Noise Certification».
Annex 16 ICAO "Environmental Protection", Volume 1, "Aircraft Noise"

2.5. Type Design Definition

FATA Type Certificate № FATA-01023A is applicable to Boeing 737-800, which Type Design is defined by:

1. FAA Type Certificate Data Sheet № A16WE;
2. Boeing Top Drawing 001A0001-800
3. Boeing 737-800 operational documentation:

- Airplane Flight Manual D631A001 with Airplane Flight Manual Supplement S1AR, approved by FAA;
- Model 737 Maintenance Review Board Report, approved by FAA;
- Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9, approved by FAA;
- Weight and Balance Manual D043A580;
- Flight Crew Operations Manual D6-27370-TBC;
- Aircraft Maintenance Manual D633A101;
- Master Minimum Equipment List (MMEL) Boeing 737, developed by FAA.

Note: Developed by FAA Master Minimum Equipment List (MMEL) for Boeing 737 aircraft is applicable considering the operational requirements of the Russian Federation.

4. Additions and changes to the type design in accordance with item. 2.19 "Required Equipment" of this Data Sheet.

2.6. Engines

Two turbofan engines developed by CFMI:
CFM56-7B24, CFM56-7B24E, CFM56-7B24E/B1,
CFM56-7B26, CFM56-7B26E, CFM56-7B26E/F,
CFM56-7B27, CFM56-7B27E, CFM56-7B27E/F,
CFM56-7B27E/B1, CFM56-7B27E/B1F, CFM56-7B27E/B3

2.6.1. Engine Limits

For engines performance and operating limitations see Type Certificate Data Sheet № CT144-АМД and FAA-approved Boeing D631A001 Airplane Flight Manual.

2.7. Auxiliary Power Unit (APU)

Gas turbine engine 131-9 or 131-9B developed by Honeywell

2.7.1. APU Limits

For APU performance and operating limitations see the FAA-approved Boeing document D631A001 Airplane Flight Manual.

2.8. Fuel

Fuels Jet-A, Jet A-1, conforming to ASTM D-1655, are allowed for use without restrictions
Fuel PT is allowed for use without restrictions.

Fuel TC-1 is allowed for use in accordance with CFMI's Service Bulletin CFM56-7B S/B 73-0138, Revision 02, of December 20, 2010.
Fuel additives – in accordance with the CFMI's Service Bulletin CFM56-7B S/B 73-0138, Revision 02, of December 20, 2010.

2.9. Fuel Quantity

See in FAA-approved Boeing D631A001 Airplane Flight Manual

2.10. Oil Quantity

See in FAA-approved Boeing D631A001 Airplane Flight Manual

2.11. Minimum Flight Crew

2 pilots (captain and co-pilot)

2.12. Maximum Number of Passengers

189

2.13. Weight Limits

	kg	pound
Maximum taxi weight (MTW)	79243	174700
Maximum take-off weight (MTOW)	79016	174200
Maximum landing weight (MLW)	66361	146300
Maximum zero fuel weight (MZFW)	62732	138300

2.14. Maximum Baggage and Cargo Weight

See in Boeing D043A580 Weight and Balance Manual.

2.15. Center of Gravity Range

See in FAA-approved Boeing D631A001 Airplane Flight Manual.

2.16. Maximum Operating Altitude

12497 m (41000 ft)

2.17. Airspeed Limits (IAS)

	Knots	Mach
V_{MO}/M_{MO} (maximum operating)	340	0,82
Other Airspeed limits are specified in FAA-approved Boeing D631A001 Airplane Flight Manual		

2.18. Airworthiness Limitations

For certification maintenance requirements and life limits See the Boeing Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9 "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)".
Note: Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9 is applicable provided that Boeing monitors the actual operation of aircraft in the Russian Federation.

2.19. Required Equipment

1. The following equipment shall be installed on the airplane:

- flight data recorder
- emergency voice recorder with recording duration not less than two hours and with capability of time recording;
- EGPWS with the function of signaling the allowable operating bank angle;
- TCAS-II;
- one fixed automatic Emergency Locator Transmitter (ELT) VHF/UHF range functioning in the «КОСПАС-САРСАТ» system actuated automatically and manually from the cockpit and one portable Emergency Locator Transmitter (ELT) VHF/UHF range functioning in the «КОСПАС-САРСАТ» system.

2. The aircraft shall be equipped with one 121.5 MHz emergency radio station located in an area that provides easy access and removability in the case of an emergency landing or ditching. It is the operator's responsibility to keep the radio station on board (if a Russian-made P-855A1 radio station is used, it is located in accordance with Boeing No. 232W4111 "Stowage Instl - Emergency Radio").

Note: Installation of an emergency radio station is not required if the portable emergency radio beacon has the function of an emergency radio station operating at 121.5 MHz.

3. The Altitude Alerting System shall have an internal 60 m (200 ft) threshold deviation alert function.
4. All inscriptions and stencils inside the aircraft related to emergency and safety equipment must be in two languages: English and Russian.
5. Aircraft must not be equipped with VHF-700 range radio communication stations designed by Collins, drawing number 622-5219-XXX.

2.20. Aircraft Noise

Aircraft is approved for compliance with:
- Aviation Regulations, Part 36 (AR-36) «Aircraft External Noise Certification», Stage 3, and Chapter 3 of Annex 16 ICAO «Environmental Protection», Volume 1, «Aircraft Noise» in aerodynamic configuration with and without Winglets, provided that the modifications are implemented in accordance with the options specified in the table:

Engine model	Without Winglets	With Winglets
CFM56-7B24	9844	9844W
CFM56-7B24E	9844	9844W
CFM56-7B24E/B1	8444	9844W
CFM56-7B26	9864	9864W
CFM56-7B26E	9864	9864W
CFM56-7B26E/F	9864	9864W
CFM56-7B27	9874	9874W
CFM56-7B27E	9874	9874W
CFM56-7B27E/F	9874	9874W
CFM56-7B27E/B1	98B4	98B4W
CFM567B27E/B1F	98B4	98B4W
CFM56-7B27E/B3	9874	9874W

The noise levels established during the certification process are listed in FAA-approved Boeing D631A001 Airplane Flight Manual.

2.21. Operational Limitations

See the FAA approved Airplane Flight Manual, Boeing D631A001 with Supplement to Airplane Flight Manual S1AR, in particular:

1. Operation is allowed at the ambient air temperature near the ground not lower than minus 50ºC and not higher than 50ºC.

Note: At ambient air temperatures near the ground below minus 42ºC, the time spent on the ground between landing and takeoff is limited to 3 hours with mandatory parking procedures as specified in the Aircraft Maintenance Manual

2. The aircraft is certified for flight operations with a reduced vertical separation minimum (RVSM) of 300 m (1000 ft) between 290 and 410 levels.
3. The aircraft is approved for CAT IIIA automatic approach with a decision altitude of 15 m (50 ft).
4. The Boeing 737-800 type design reliability and performance are found capable of Extended Range Operation (ETOPS) with diversion time up to 180 minutes when operating and maintaining the aircraft in accordance with Boeing D044A007 "737-600/-700/-700C/-800/-900/-900ER ETOPS Configuration, Maintenance and Procedures".

However, this approval does exclude the need of operational approval for ETOPS

flights for a specific operator.

5. For overwater flights, the aircraft must be equipped with liferafts. The number of liferafts, their capacity and location must meet the requirements of 25.1411(a)(b)(d) and 25.1415(a)(b)(c)(d) AP-25.

6. In order to perform ADF approach the aircraft shall be equipped with at least two automatic radio compasses or one ADF with two frequency selectors.

7. Flights shall be allowed in the airspace where secondary ATC radar control is provided in RBS mode.

2.22. List of approved STC (Supplemental Type Certificates).

№	STC Description	STC Holder	STC Number	Issued by
1	Winglet or Partial Wing Retrofit Installation	Aviation Partners Boeing, 2811 South 102nd Street, Suite 200, Seattle, WA 98168	ST00830SE	FAA
2	Installation of a CMC Electronics Class 3 Electronic Flight Bag (EFB) System 1)	Electronic Cable Specialist Inc. 5300 W, Franklin Drive, Franklin, WI 53132	ST03007CH	FAA
3	Split Scimitar Winglet System Retrofit Installation	Aviation Partners Boeing, 2811 South 102nd Street, Suite 200, Seattle, WA 98168	ST00830SE	FAA

Note:

The content of the electronic manuals and other information uploaded to the Electronic Flight Bag by the operator or at the operator's request is subject to approval in accordance with the procedure established by the aviation authorities of the state of operator.

2.23. Boeing 737-800BCF Version

2.23.1. Brief Aircraft Description

Transport category freighter airplane.

The Boeing 737-800BCF design version is a conversion of the Boeing 737-800 from passenger to freighter configuration. Below are the differences from the basic version of Boeing 737-800.

2.23.2. Certification Basis

Certification Specification	CB items for which equivalent safety has been demonstrated	Special Technical Conditions
CRI A-01 «FATA/AR RF Type Certification Basis»	25.571 25.841(a)(2)(3) 25.1447(c)(1)	CRI S-01 «Damage-tolerance evaluation» CRI ECS-01 «Pressurized cabins»

2.23.3. Type Design Definition

FATA Type Certificate № FATA-01023A is applicable to Boeing 737-800, which Type Design is defined by:

1. FAA Type Certificate Data Sheet № A16WE;
2. Boeing Top Drawing 800A0003;
3. Boeing 737-800 operational documentation:

- Airplane Flight Manual D631A001 with Airplane Flight Manual Supplement S1AR, approved by FAA;
- Model 737 Maintenance Review Board Report, approved by FAA;
- Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9, approved by FAA;
- Weight and Balance Manual D043A580;
- Flight Crew Operations Manual D6-27370-800;
- Aircraft Maintenance Manual D633A101;
- Master Minimum Equipment List (MMEL) Boeing 737, developed by FAA.

Note: Master Minimum Equipment List (MMEL) developed by FAA for Boeing 737 is applicable with consideration of the operational requirements of the Russian Federation

4. Additions and changes to the type design in accordance with item 2.19 “Required Equipment” of this Data Sheet

2.23.4. Minimum Flight Crew

2 pilots (captain and co-pilot).

2.23.5. Maximum Number of Passengers

Passenger transportation is prohibited

2.23.6. Maximum Baggage and Cargo Weight

See in Boeing D043A580 Weight and Balance Manual.

2.23.7. Required Equipment

Equipment must be installed on the aircraft in accordance with Boeing 737-800BCF Type Design Definition for FATA / AR RF D923A309.

2.23.8. Operational Limitations

See in FAA-approved Boeing D631A001 Airplane Flight Manual with Supplement to Airplane Flight Manual S1AR, in particular:

1. Boeing 737-800BCF is not allowed for ETOPS flights.
2. Flights are allowed in airspace where secondary ATC radar control is provided in RBS mode.
3. For other restrictions, see FAA TCDS A16WE.

2.23.9. List of approved STC (Supplemental Type Certificates).

№ п/п	STC Description	STC Holder	STC Number	Issued by
1	Winglet or Partial Wing Retrofit Installation	Aviation Partners Boeing, 2811 South 102nd Street, Suite 200, Seattle, WA 98168	ST00830SE	FAA
2	Installation of a CMC Electronics Class 3 Electronic Flight Bag (EFB) System 1)	Electronic Cable Specialist Inc. 5300 W, Franklin Drive, Franklin, WI 53132	ST03007CH	FAA
3	Split Scimitar Winglet System Retrofit Installation	Aviation Partners Boeing, 2811 South 102nd Street, Suite 200, Seattle, WA 98168	ST00830SE	FAA
4	Installation of main deck cargo loading system	Ancra International LLC, 875 West 8th Street, Azusa CA 91702, United States	ST02666LA	FAA
5	Fabrication of lightweight window plugs	LiteAir Aviation Products Inc, 7001 Palm Lane, Anacortes WA 98221, United States	ST01091SE	FAA
6	Installation of 9g Rigid Cargo Barrier	Ventura Aerospace Inc, 31355 Agoura Road, Westlake Village CA 91361 United States	ST02667LA	FAA

Note:

The content of the electronic manuals and other information uploaded to the Electronic Flight Bag by the operator or at the operator's request is subject to approval in accordance with the procedure established by the aviation authorities of the state of operator.

STC 4,5,6 are the integral part of the Boeing 737-800BCF type design and shall be installed on each aircraft.

3. Boeing 737-900ER

3.1. Developer and Manufacturer

THE BOEING COMPANY
1901 Oakesdale Ave SW Renton, WA 98057-2623

3.2. Brief Aircraft Description

Transport category passenger airplane.

3.3. Initial Certification

Type Certificate № CT169-B737-800 with Supplement № CT169-B737-800/Д01, issued by IAC AR on 26.02.2010.

3.4. Certification Basis

Aviation Regulations, Part 25 (AP-25) «Airworthiness requirements for transport category airplanes», Amendments 1 -3.
Aviation Regulations, Part 36 (AR-36) «Aircraft External Noise Certification».
Annex 16 ICAO "Environmental Protection", Volume 1, "Aircraft Noise"

3.5. Type Design Definition

FATA Type Certificate № FATA-01023A is applicable to Boeing 737-900ER, which Type Design is defined by:

1. FAA Type Certificate Data Sheet № A16WE;
2. Boeing Document 737-900ER Amended Type Design Configuration, DDL 737-900ER;
3. Boeing 737-900ER operational documentation:
   - Airplane Flight Manual D631A001 with Airplane Flight Manual Supplement S1AR, approved by FAA;
   - Model 737 Maintenance Review Board Report, approved by FAA;
   - Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9, approved by FAA;
   - Weight and Balance Manual D043A590;
   - Flight Crew Operations Manual D6-27370-TBC;
   - Aircraft Maintenance Manual D633A101;
   - Master Minimum Equipment List (MMEL) Boeing 737, developed by FAA.

Note: Master Minimum Equipment List (MMEL) developed by FAA for Boeing 737 is applicable with consideration of the operational requirements of the Russian Federation.

4. Additions and changes to the type design in accordance with item 3.19 "Required Equipment" of this Data Sheet.

3.6. Engines

Two CFMI turbofan engines:
CFM56-7B26, CFM56-7B26/3, CFM56-7B26/3F,
CFM56-7B27, CFM56-7B27/3, CFM56-7B27/3F,
CFM56-7B27/3B1, CFM56-7B27/3B1F, CFM56-7B27/3B3

3.6.1. Engine Limits

For engines performance and operating limitations see Type Certificate Data Sheet № CT144-АМД and FAA-approved Boeing D631A001 Airplane Flight Manual.

3.7. Auxiliary Power Unit

Gas turbine engine 131-9 or 131-9B developed by Honeywell.

3.7.1. APU Limits

For APU performance and operating limitations see the FAA-approved Boeing D631A001Airplane Flight Manual.

3.8. Fuel

Fuels Jet-A, Jet A-1, conforming to ASTM D-1655, are allowed for use without restrictions.
Fuel PT is allowed for use without restrictions.
Fuel TC-1 is allowed for use in accordance with CFMI's Service Bulletin CFM56-7B S/B 73-0138, Revision 02, of December 20, 2010.

Fuel additives – in accordance with the CFMI's Service Bulletin CFM56-7B S/B 73-0138, Revision 02, of December 20, 2010.

3.9. Fuel Quantity

The maximum amount of fuel is 26025 liters (6875 US gallons) without additional fuel tanks.

3.10. Oil Quantity

See in FAA-approved Boeing D631A001 Airplane Flight Manual.

3.11. Minimum Flight Crew

2 pilots (captain and co-pilot)

3.12. Maximum Number of Passengers

The two-door configuration with deactivated MED has a capacity of 189 passengers.

The three-door configuration is based on the activation and classification of the Mid-Cabin Emergency Door (MED).

The three-door configuration with activated MED, classified as Type II – maximum number of passengers – 215.

The three-door configuration with activated MED, classified as Type I – maximum number of passengers – 220.

3.13. Weight Limits

	kg	pound
Maximum taxi weight (MTW)	85366	188200
Maximum take-off weight (MTOW)	85139	187700
Maximum landing weight (MLW)	71350	157300
Maximum zero fuel weight (MZFW)	67721	149300

3.14. Maximum Baggage and Cargo Weight

See in Boeing D043A590 Weight and Balance Manual.

3.15. Center of Gravity Range

See in FAA-approved Boeing D631A001 Airplane Flight Manual.

3.16. Maximum Operating Altitude

12497 m (41000 ft))

3.17. Airspeed Limitations (IAS)

	Knots	Mach
V_{MO}/M_{MO} (maximum operating)	340	0,82
Other airspeed limits are specified in FAA-approved Boeing D631A001 Airplane Flight Manual		

3.18. Airworthiness Limitations

For certification maintenance requirements and life limits see the Boeing Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9 "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)" for certification maintenance requirements and life limits.

Note: Maintenance Planning Data Document (MPD) D626A001-CMR, Section 9 is applicable provided that Boeing monitors the actual operation of aircraft in the Russian Federation.

3.19. Required Equipment

1. The following equipment shall be installed on the airplane:
- flight data recorder;
- emergency voice recorder with recording duration not less than two hours and with capability of time recording;
- EGPWS with the function of signaling the allowable operating bank angle;
- TCAS-II;
- One fixed automatic Emergency Locator Transmitter (ELT) VHF/UHF range functioning in the «КОСПАС-САРСАТ» system actuated automatically and manually from the cockpit and one portable Emergency Locator Transmitter (ELT) VHF/UHF

range functioning in the «КОСПАС-САРСАТ» system.

2. The aircraft shall have one 121.5 MHz emergency radio station located in an area that provides easy access and removability in the case of an emergency landing or ditching. It is the operator's responsibility to keep the radio station on board (if a Russian-made P-855A1 radio station is used, it is located in accordance with Boeing No. 232W4111 "Stowage Instl - Emergency Radio").

Note: Installation of an emergency radio station is not required if the portable emergency radio beacon has the function of an emergency radio station operating at 121.5 MHz.

3. The Altitude Alerting System shall have an internal 60 m (200 ft) threshold deviation alert function.
4. All inscriptions and stencils inside the aircraft related to emergency and safety equipment must be in two languages: English and Russian.
5. Aircraft shall not be equipped with VHF-700 radio communication stations designed by Collins, drawing number 622-5219-XXX.

3.20. Aircraft Noise

Aircraft is approved for compliance with Aviation Regulations, Part 36 (AR-36) «Aircraft External Noise Certification», Stage 4, and Chapter 4 of Annex 16 ICAO «Environmental Protection», Volume 1, «Aircraft Noise»

The noise levels established during the certification process are listed in FAA-approved Boeing D631A001 Airplane Flight Manual.

3.21. Operational Limitations

See in FAA-approved Boeing D631A001 Airplane Flight Manual with Supplement to Airplane Flight Manual D631A001-S1AR, in particular:

1. Operation is allowed at the ambient air temperature near the ground not lower than minus 50ºC and not higher than 50ºC.

Note: At ambient air temperatures near the ground below minus 42ºC, the time spent on the ground between landing and takeoff is limited to 3 hours with mandatory parking procedures as specified in the Aircraft Maintenance Manual

2. The aircraft is certified for flight operations with a reduced vertical separation minimum (RVSM) of 300 m (1000 ft) between 290 and 410 levels.
3. The aircraft is approved for CAT IIIA automatic approach with a decision altitude of 15 m (50 ft)
4. The Boeing 737-900ER type design reliability and performance are found capable of extended range operations (ETOPS) with deviation time up to 180 minutes when operating and maintaining the aircraft in accordance with Boeing D044A007 "737-600/-700/-700C/-800/-900/-900ER ETOPS Configuration, Maintenance and Procedures".

However, this approval does exclude the need of operational approval for ETOPS flights for a specific operator.

5. For overwater flights the aircraft must be equipped with liferafts. The number of liferafts, their capacity and location must meet the requirements of the paragraph above. 25.1411(a)(b)(d) and 25.1415(a)(b)(c)(d) AP-25
6. In order to perform ADF approach the aircraft shall be equipped with at least two automatic radio compasses or one ADF with two frequency selectors
7. Flights shall be allowed in the airspace where secondary ATC radar control is provided in RBS mode.

3.22. List of approved STC (Supplemental Type Certificates)

№ п/п	STC Description	STC Holder	STC Number	Issued by
1	Installation of a CMC Electronics Class 3 Electronic Flight Bag (EFB) System [1)]	Electronic Cable Specialist Inc. 5300 W, Franklin Drive, Franklin, WI 53132	ST03007CH	FAA

Note:

The content of the electronic manuals and other information uploaded to the Electronic Flight Bag by the operator or at the operator's request is subject to approval in accordance with the procedure established by the aviation authorities of the state of operator.

Section 4. Boeing 737-8

4.1. Developer and Manufacturer

THE BOEING COMPANY
1901 Oakesdale SW Renton, WA 98057-2623

4.2. Brief Aircraft Description

Transport category passenger airplane.

4.3. Certification Basis

Aviation Regulations, Part 25 (AR-25) «Airworthiness Standards: Transport Category Airplanes», Ammendements 1 -3.
Aviation Regulations, Part 36 (AR-36) «Aircraft External Noise Certification».
Annex 16 ICAO "Environmental Protection", Volume 1, "Aircraft Noise"

4.4. Type Design Definition

FATA Type Certificate № FATA-01023A is applicable to Boeing 737-8, which Type Design is defined by:

1. FAA Type Certificate Data Sheet № A16WE;
2. Boeing Descriptive Data List Document D926A005 "737-8 MAX ATC DDL, Phase 1";
3. Boeing 737-8 operational documentation:
   - Airplane Flight Manual D631A002 with Supplement Airplane Flight Manual D631A002-FATA approved by FAA;
   - Model 737-7/-8/-9 Maintenance Review Board Report, approved by FAA;
   - 737-7/-8/-9 Maintenance Planning Data Document (MPD) D626A011, Раздел 9, approved by FAA;
   - Weight and Balance Manual D043A080;
   - Flight Crew Operations Manual D6-27370-MAX-TBC;
   - Aircraft Maintenance Manual D633AM101;
   - Master Minimum Equipment List (MMEL) Boeing 737MAX, developed by FAA.

   Note: FAA-developed Master Minimum Equipment List (MMEL) for Boeing 737MAX aircraft is applicable with consideration of the operational requirements of the Russian Federation.
4. Amendments and Supplements to the type design in accordance with item 4.18 «Mandatory Equipment» of this Data Sheet.

4.5. Engines

Two turbofan engines CFM LEAP-1B series by CFM International S.A.
FATA Type Certificate No. FATA-01017E dated 17.09.2018
Engine models and configurations:
LEAP-1B28G05
LEAP-1B28B1G05
LEAP-1B27G05
LEAP-1B25G05
LEAP-1B28G06
LEAP-1B28B1G06
LEAP-1B27G06
LEAP-1B25G06

4.5.1. Engine limits

For engines performance and operating limitations see Type Certificate Data Sheet № FATA-01017E and FAA-approved Boeing D631A002.Airplane Flight Manual.

4.6. Auxiliary Power Unit

Gas turbine engine 131-9 [B] developed by Honeywell.

4.6.1. APU Limits

APU performance and operating limitations see in FAA-approved Boeing D631A002 Airplane Flight Manual.

4.7. Fuel

Aviation fuels meeting the requirements of the Boeing document D6-85140-101 "Aviation Fuel and Fuel Additives Properties, Composition and Performance Requirements" are approved for use without restrictions.
The fuel specifications that meet these requirements are as follows:

Jet-A, Jet A-1, conforming to ASTM D-1655,
Jet A-1, conforming to UK MoD Def-Stan 91-01,
JP-5, conforming to MIL-DTL-5624,
JP-8, conforming to MIL-DTL-83133.

This list is not exhaustive. Other fuel specifications, including TS-1 and PT (GOST 10227), may be used if they comply with the requirements of the Boeing document D6-85140-101.

Fuel additives shall comply with the document D6-85140-101.

It is the responsibility of the operator to ensure that the fuels and additives used in operation comply with the requirements set forth in the document D6-85140-101.

4.8. Fuel Quantity

See in FAA-approved Boeing D631A002 Airplane Flight Manual.

4.9. Oil Quantity

See in FAA-approved Boeing D631A002 Airplane Flight Manual.

4.10. Minimum Flight Crew

2 pilots (captain and co-pilot)

4.11. Maximum Number of Passengers

189

4.12. Weight Limits

	Kg	Lbs
Maximum taxi weight (MTW)	82418	181700
Maximum take-off weight (MTOW)	82191	181200
Maximum landing weight (MLW)	69309	152800
Maximum zero fuel weight (MZFW)	65952	145400

4.13. Maximum Baggage and Cargo Weight

See in Boeing D636A080 Weight and Balance Manual.

4.14. Center of Gravity Range

See in FAA-approved Boeing D631A002 Airplane Flight Manual.

4.15. Maximum Operating Altitude

12497 m (41000 ft)

4.16. Airspeed Limits

	Knots	Mach
V_{MO}/M_{MO} (maximum operating)	340	0,82
Other Airspeed limits are specified in FAA-approved Boeing D631A002 Airplane Flight Manual.		

4.17. Airworthiness Limitations

For continued airworthiness instructions see the Boeing document: "737-7/-8/-9 Maintenance Planning Document" (MPD) D626A011, Section 9, which includes the following FAA-approved documents:

- D626A011-9-01, 737-7/-8/-9 Airworthiness Limitations (AWLs). Contains required structural inspections and the retirement times for structural safe-life and life-limited parts. Also contains required retirement times for systems life-limited parts and other systems limitations;
- D626A011-9-02, 737-7/-8/-9 Airworthiness Limitations (AWLs) – Line Number Specific. Existing structures AWLs that were impacted by airplane production nonconformances may result in airplane specific revised inspection requirements and/or inspection intervals;
- D626A011-9-03, 737-7/-8/-9 Certification Maintenance Requirements (CMR). The document contains the mandatory periodic tasks related to specific systems and established as certification requirements for maintenance;

- D626A011-9-04, 737-7/-8/-9 Special Compliance Items (SCI)/Airworthiness

Limitations. This document contains Airworthiness Limitations (ALI) and Critical Design Configuration Control (CDCCL) guidelines to ensure compliance with FAR25.981/AP-25.981 fuel tank fire protection requirements.

Note: Maintenance Planning Data Document (MPD) D626A011, Section 9 is applicable provided that Boeing monitors the actual operation of aircraft in the Russian Federation.

4.18. Required Equipment

The following equipment should be installed on the airplane:

1. One 121.5 MHz emergency radio station located in an area that provides easy access and removability in the case of an emergency landing or ditching. It is the operator's responsibility to keep the radio station on board.

Note: Installation of an emergency radio station is not required if the portable emergency radio beacon has the function of an emergency radio station operating at 121.5 MHz.

2. All inscriptions and stencils inside the aircraft related to emergency and safety equipment must be in two languages: English and Russian.

4.19. Aircraft Noise

Aircraft is approved for compliance with Aviation Regulations, Part 36 (AP-36) « Aircraft External Noise Certification», Stage 4, and Chapter 3 of Annex 16 ICAO «Environmental Protection», Volume 1, «Aircraft Noise».

The noise levels established during the certification process are listed in FAA-approved Boeing D631A002 Airplane Flight Manual.

4.20. Operational Limitations

See in Boeing D631A002 Airplane Flight Manual with Supplement to Airplane Flight Manual D631A002-FATA, approved by FAA, in particular:

1. Operation is allowed at the ambient air temperature near the ground not lower than minus 50ºC and not higher than 50ºC

Note: At ambient air temperatures near the ground below minus 42ºC, the time spent on the ground between landing and takeoff is limited to 3 hours with mandatory parking procedures as specified in the Aircraft Maintenance Manual

2. The aircraft is certified for flight operations with a reduced vertical separation minimum (RVSM) of 300 m (1000 ft) between 290 and 410 levels

3. The aircraft is approved for CAT IIIA automatic approach and landing.

4. The Boeing 737-8 type design reliability and performance were found capable of extended range operations (ETOPS) with deviation time up to 180 minutes when operating and maintaining the aircraft in accordance with Boeing D044A032 “737 MAX ETOPS Configuration, Maintenance and Procedures”.

However, this approval does not exclude the need for operational approval for ETOPS flights for a specific operator.

5. In order to perform ADF approach the aircraft shall be equipped with at least two automatic radio compasses or one ADF with two frequency selectors.

6. Flights shall be allowed in the air area where secondary ATC radar control is provided in RBS mode.

Section 5. Additional Information.

5.1. TCDS Change Record

Issue		Date	Description	Applicability
01		17.09.2018	Reissue of Type Certificate due to addition of Boeing 737-8 model	Boeing 737-700 Boeing 737-800 Boeing 737-900ER Boeing 737-8
02		10.10.2018	Adding new LEAP-1B engine configurations	Boeing 737-8
03		18.02.2019	Adding a Boeing 737-800BCF version	Boeing 737-800

Other restrictions and recommendations are given in the approved operational documentation

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Deputy Head A. Novgorodov