TYPE CERTIFICATE DATA SHEET

No. EASA.IM.R.105

for

214B

Type Certificate Holder
McDermott 214 Holdings, LLC
7400 Oak Hills Court
North Richland, Texas 76182-3284
USA

For Models: 214B, 214B-1
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SECTION 1: 214B, 214B-1

I. General

1. Type/ Model
   1.1 Type
       214B
   1.2 Models
       214B, 214B-1 (see III.2)

2. Airworthiness Category
   Large Rotorcraft, Category B

3. Manufacturer
   McDermott 214 Holdings, LLC.
   7400 Oak Hills Court
   North Richland, Texas 76182-3284, USA

4. Type Certification Application Date to
   FAA: 26 October 1972
   LBA: not recorded
   CAA SE: not recorded
   DGAC FR: not recorded
   ENAC IT: 27 October 1994

5. State of Design Authority
   FAA

6. Type Certificate Date by
   FAA: 27 January 1976 (214B),
       3 February 1976 (214B-1)
   LBA: 25 June 1976
   CAA SE: 30 January 1981
   DGAC FR: 27 January 1989
   ENAC IT: 22 March 1995

7. Type Certificate n° by
   FAA: H6SW
   LBA: 3047
   CAA SE: 1/81
   DGAC FR: IM 180
   ENAC IT: A 323

8. Type Certificate Data Sheet n°
   FAA: H6SW
   LBA: 3047
   CAA SE: 30 January 1981
   DGAC FR: IM 180
   ENAC IT: SO/A 323

9. EASA Type Certification Date
   28 September 2003, in accordance with CR (EU)
   1702/2003, Article 2, 3., (a), (i), 2nd bullet, 2nd indented
   bullet.

II. Certification Basis

1. Reference Date for determining the
   applicable requirements
   26 October 1972

2. Airworthiness Requirements
   FAR Part 29, dated 1 February 1965 (Transport
   Category B), Amfds. 29-1 through 29-9 and Amdt. 29-11

3. Special Conditions
   No. 29-65-SW-5

4. Exemptions
   none

5. Deviations
   none

6. Equivalent Safety Findings
   none

7. Environmental Protection Requirements
   7.1 Noise Requirements
       See TCDSN EASA.IM.R.105
   7.2 Emission Requirements
       n/a
III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   BHTI Drawing 214-900-002. See also Note 11.

2. Description
   Main rotor: two blades, teetering type
   Tail rotor: two blades, teetering type
   Fuselage: conventional metal structure
   Landing gear: skid type
   Powerplant: one free turbine engines

   Note: Except for a difference in maximum weight, the models 214B and 214B-1 are identical to each other.

3. Equipment
   Refer to approved RFM for equipment list

4. Dimensions
   4.1 Fuselage
      Length: 13.44 m (44 ft 1 in)
      Width skids: 2.64 m (8 ft 8 in)
      Height (TR shaft): 3.10 m (10 ft 3 in)

   4.2 Main Rotor
      Diameter: 15.24 m (50 ft)

   4.3 Tail Rotor
      Diameter: 2.95 m (9 ft 8 in)

5. Engine
   5.1 Model
      Honeywell International Inc. (former: Lycoming)
      1 x Model T55D8D

   5.2 Type Certificate
      FAA TC/TCDS n°: E4NE
      EASA TC/TCDS n°: none

   5.3 Limitations
      5.3.1 Installed Engine Limitations and Transmission Torque Limits

<table>
<thead>
<tr>
<th></th>
<th>Output shaft TQ [(% shp)]</th>
<th>Output shaft speed [% (rpm)]</th>
<th>Exhaust gas temperature [°C (°F)]</th>
<th>Gas generator speed [% (rpm)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOP (5 min)</td>
<td>100 (2 050)</td>
<td>100 (14 695)</td>
<td>721 (^{(1)}) (1 330 (^{(1)}))</td>
<td>100.6 (18 832)</td>
</tr>
<tr>
<td>MCP</td>
<td>90 (1 850)</td>
<td></td>
<td>692 (^{(1)}) (1 278 (^{(1)}))</td>
<td>97.9 (18 327)</td>
</tr>
</tbody>
</table>

\(^{(1)}\) At 54.4 °C (130 °F) ambient temperature

5.3.2 Other Engine and Transmission Torque Limits
   reserved

6. Fluids
   6.1 Fuel
      MIL-T-5624, Grade I, (JP-4), or, MIL-T-5624 Grade II (JP-5)
      see Note 8

   6.2 Oil
      MIL-PRF-7808, Type E or subsequent suffixes (all temperature), or, MIL-PRF-23699 Class HTS (above -40°C)

   6.3 Additives
      For anti-icing additive see Note 8
7. Fluid capacities
   7.1 Fuel[3]
       772 litres (204 US gal) at STA +153.8
       Unused fuel: 11 kg (25.2 lb) at STA +140.0
   7.2 Oil[1]
       Usable oil: 14.0 litres (3.75 US gal) at STA +195.0
       included in capacity
       Undrainable engine oil: 4.2 kg (9.2 lb) at STA +195.0
   7.3 Coolant System Capacity
       n/a

8. Air Speed Limitations
   Maximum V_{ne} 140 KIAS
   See placard P/N 214-075-256
   (V_{ne} (IAS) varies with pressure altitude and temperature)

9. Rotor Speed Limitations
   Power on: Maximum 300 rpm (100 %*)
   Minimum 294 rpm (98 %*)
   Power off: Maximum 315 rpm (105 %*)
   Minimum 257 rpm (86 %*)
   *: Tach reading

10. Maximum Operating Altitude and Temperature
    10.1 Altitude (en route) 20 000 ft (6 096 m) PA
    10.2 Temperature
        -31°C (-31°F) to +52°C (+125°F)

11. Operating Limitations
    VFR day/night

12. Maximum Mass
    6 260 kg (13 800 lb) for 214B
    5 670 kg (12 500 lb) for 214B-1
    7 257 kg (16 000 lb) for 214B and 214B-1 external
cargo operations (see Note 3)

13. Centre of Gravity Range
    Longitudinal C.G. limits [mm (in)] at [kg (lb)]:
    3 480 to 3 581 (+137.0 to +141.0) at 6 260 (13 800)
    3 366 to 3 665 (+132.5 to +144.3) at 5 670 (12 500)
    3 366 to 3 734 (+132.5 to +147.0) at (4 990 11 000)
    3 366 to 3 734 (+132.5 to +147.0) at 4 649 (10 250)
    3 439 to 3 734 (+135.4 to +147.0) at 3 856 (8 500)
    3 480 to 3 683 (+137.0 to +145.0) at 3 402 (7 500)
    Straight-line variation between points given.
    Lateral C.G. limits:
    102 mm (4.0 in) left of centre line
    120 mm (4.7 in) right of centre line
    Empty mass C.G. range:
    See Chapter 8, Maintenance Manual (BHT-214B-MM-1)

14. Datum
    Longitudinal: STA 0 is located 508 mm (20 in) aft of
    the most forward point of the fuselage nose section.

15. Levelling Means
    Plumb line from top of left main door frame

16. Minimum Flight Crew
    one (1) pilot

17. Maximum Passenger Seating Capacity
    fifteen (15)
    (not limited by emergency exit requirements)

18. Passenger Emergency Exit
    2, one on each side of the cabin

    none (no baggage compartment)

20. Rotor Blade Control Movement
    For rigging information refer to Maintenance Manual
    (BHT-214B-MM-1)

21. Auxiliary Power Unit (APU)
    n/a

[3] Data as per TCDS H6SW
IV. Operating and Service Instructions

1. Flight Manual
   214B: BHT-214B-FM-1 – Rotorcraft Flight Manual, approved 27 January 1976, or later revisions

   BHT-214B-MM-1-Aircraft General
   BHT-214B-MM-2-Instruments/Electrical/Avionics

   BHT-ALL-SRM - Structural Repair Manual

   Refer to approved RFM, Section 6

5. Illustrated Parts Catalogue
   BHT-214B-IPB Illustrated Parts Breakdown

6. Miscellaneous Manuals
   BHT-214B-CR&o Component Repair and Overhaul Manual

7. Service Letters and Service Bulletins
   As published by McDermott 214 Holdings LLC, Erickson 214 Holdings LLC, Bell Textron Inc. and Bell Helicopter Textron Inc.

8. Required Equipment
   The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification basis) must be installed in the helicopter for certification.

V. Notes

1. Manufacturer’s eligible serial numbers: s/n 28001 to 28071. See also Note 11.

2. *) Current weight and balance report, including list of equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each helicopter at the time of original certification.
   The certificated empty weight and corresponding C.G. locations must include a total undrainable oil of 4 kg (9.2 lb) at STA +195.0 and unusable fuel of 11 kg (25.2 lb) at STA +140.0.

3. Model 214B/B-1 helicopters equipped with the external cargo suspension installation completed in accordance with Bell Drawing 214-706-002 meet the structural and design requirements of the certification basis when operated to 7 257 kg (16 000 lb) gross mass in accordance with the limits of FAA-approved Model 214B Helicopter Flight Manual, dated 27 January 1976, and Model 214B-1 Manual dated 2 February 1976. The retirement times referenced in Note 4 are not changed. Gross masses above 6 260 kg (13 800 lb) must not be imposed on the landing gear.

4. No partition must be installed between the passenger and crew compartments that will obstruct the pilot’s view of the passenger large sliding doors and hinged panels. No Interior linings must be installed that obstruct the view of the crew/passenger front doors latch engagement with the fuselage.

5. VHF navigation installations are limited to Collins Radio Type VIR31H, P/N 622-2819-004 due to rotor modulation interference. Other installations require approval.

6. Engine gas producer speed shown under ‘engine limits’ is the absolute maximum permissible rotation speed. Equal or lower speeds are established for each engine during engine calibration and are stamped on the engine data plate. Maximum usable (limiting) gas producer speeds for take-off and for maximum continuous power vary with ambient temperature and are shown on the engine limitations placard on the instrument panel. This placard includes information on engine data plate speeds which must agree with the actual engine installed in the helicopter.

7. Maximum usable (limiting) exhaust gas temperature for take-off and maximum continuous engine operation varies with ambient temperature and is shown on the placard described in Note 8 above.

8. For all operations below 4.44 °C (40°F) ambient temperature, all fuel used in Model 214B
V. Notes

Helicopters must contain Phillips PFA-55MB anti-icing additive in concentrations of not less than 0.035% nor more than 0.15% by volume. Blending this additive into the fuel and checking its concentration must be conducted in the manner prescribed by the Rotorcraft Flight Manual.

9. Composite (fiberglass) main rotor blades (214-018-402 or 214-015-500) must:
   - have conductive paint (a minimum resistance required) for lightning protection.
   - be in white colour on the external superior skin in order to reduce the heating absorption, with the exception of blade tip.

   If composite main rotor blades are installed, the following RFM Supplement FMS-13 or FMS-14 for Bell 214B, and FMS-15 for Bell 214B-1, have to be part of the RFM.

10. Kits with related RFM Supplement which can be installed (applicable model: see RFM Supplement)

<table>
<thead>
<tr>
<th>Kit-n°</th>
<th>Description</th>
<th>RFM Supplement</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>214-706-017</td>
<td>Cargo Hook Loadmeter</td>
<td>214B/B1-FMS-1</td>
<td>---</td>
</tr>
<tr>
<td>214-899-100</td>
<td>Second DC Generator</td>
<td>214B/B1-FMS-2</td>
<td>---</td>
</tr>
<tr>
<td>214-899-300</td>
<td>FD 109 flight director</td>
<td>214B/B1-FMS-3</td>
<td>---</td>
</tr>
<tr>
<td>214-899-302</td>
<td>VLF-1000 Ontrac II</td>
<td>214B/B1-FMS-4</td>
<td>---</td>
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<tr>
<td>205-706-047</td>
<td>Three place litter</td>
<td>214B/B1-FMS-6</td>
<td>---</td>
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<tr>
<td>205-706-045</td>
<td>Auxiliary Fuel System</td>
<td>214B/B1-FMS-7</td>
<td>---</td>
</tr>
<tr>
<td>214-899-565</td>
<td>VLF-1010 Ontrac III</td>
<td>214B/B1-FMS-8</td>
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<tr>
<td>214-706-101</td>
<td>Winterization</td>
<td>214B/B1-FMS-9</td>
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<tr>
<td>214-899-531</td>
<td>Aft Auxiliary Fuel Cell System</td>
<td>214B/B1-FMS-10</td>
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<tr>
<td>205-706-045</td>
<td>Three place litter</td>
<td>214B/B1-FMS-6</td>
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<tr>
<td>214-703-001</td>
<td>Increased EGT operation</td>
<td>214B/B1-FMS-11</td>
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<td>214-706-003</td>
<td>Internal hoist</td>
<td>214B/B1-FMS-12</td>
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<tr>
<td>214-018-402</td>
<td>Fiberglass Main Rotor Blades</td>
<td>214B-FMS-13</td>
<td>214B only</td>
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<tr>
<td>214-704-068</td>
<td>Fiberglass Main Rotor Blades Retrofit Kit</td>
<td>214B-FMS-14</td>
<td>214B only</td>
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<tr>
<td>214-704-068</td>
<td>Fiberglass Main Rotor Blades</td>
<td>214B-FMS-15</td>
<td>214B-1 only</td>
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</tbody>
</table>

11. FAA TCDS H6SW, Revision 9 refers on page 2 to ‘Serial Nos. eligible 27001 and 28001 and up’. However, ‘s/n 27001 to 27297 are assigned to model 214A, which is not listed in TCDS H6SW. To what extent the top drawing 214-900-002 (see III.1.) includes the 214A or a conversion kit to 214B configuration is currently subject to a clarification together with the FAA.

* * *
SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>KIAS</td>
<td>Knots Indicated Air Speed</td>
<td>s/n</td>
<td>Serial Number</td>
</tr>
<tr>
<td>MMEL</td>
<td>Master Minimum Equipment List</td>
<td>STA</td>
<td>Station</td>
</tr>
<tr>
<td>MR</td>
<td>Main Rotor</td>
<td>TR</td>
<td>Tail Rotor</td>
</tr>
<tr>
<td>OSD</td>
<td>Operational Suitability Data</td>
<td>VFR</td>
<td>Visual Flight Rules</td>
</tr>
<tr>
<td>PA</td>
<td>Pressure Altitude</td>
<td>VME</td>
<td>Never Exceed Speed</td>
</tr>
<tr>
<td>PWR</td>
<td>Power</td>
<td>V_{PWR\text{off}}</td>
<td>Power-off Speed (Autorotation)</td>
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<tr>
<td>RFM</td>
<td>Rotorcraft Flight Manual</td>
<td>V_{PWR\text{on}}</td>
<td>Power-on Speed</td>
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II. Type Certificate Holder Record

<table>
<thead>
<tr>
<th>II.1 Type Certificate Holder</th>
<th>Period</th>
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<tbody>
<tr>
<td>Bell Helicopter Textron Inc.</td>
<td>From 16 February 1982 until 30 July 2019</td>
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<tr>
<td>P.O. 482</td>
<td></td>
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<tr>
<td>Fort Worth, Texas 76101, USA</td>
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<tr>
<td>Bell Textron Inc.</td>
<td>Until 7 September 2020</td>
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<tr>
<td>P.O. 482</td>
<td></td>
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<tr>
<td>Fort Worth, Texas 76101, USA</td>
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<tr>
<td>Erickson 214 Holdings, LLC.</td>
<td>Until 7 November 2023</td>
</tr>
<tr>
<td>3100 Willow Springs Road</td>
<td></td>
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<tr>
<td>Central Point, Oregon 97502-0010, USA</td>
<td></td>
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<tr>
<td>McDermott 214 Holdings, LLC.</td>
<td>From 8 November 2023</td>
</tr>
<tr>
<td>7400 Oak Hills Court</td>
<td></td>
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<tr>
<td>North Richland, Texas 76182-3284, USA</td>
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III. Change Record

<table>
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<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC Issue</th>
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<tr>
<td>Issue 1</td>
<td>29 Feb 2024</td>
<td>Initial issue of EASA TCDS</td>
<td>29 February 2024</td>
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