TYPE CERTIFICATE DATA SHEET

No. EASA.IM.R.505

for

214ST

Type Certificate Holder
McDermott 214 Holdings, LLC

7400 Oak Hills Court
North Richland, Texas 76182-3284
USA

For Model: 214ST
TABLE OF CONTENTS

SECTION 1: 214ST .................................................................................................................. 3
   I. General .......................................................................................................................... 3
   II. Certification Basis ....................................................................................................... 3
   III. Technical Characteristics and Operational Limitations ......................................... 3
   IV. Operating and Service Instructions ......................................................................... 6
   V. Notes .......................................................................................................................... 6

SECTION: ADMINISTRATIVE .......................................................................................... 7
   I. Acronyms and Abbreviations .................................................................................... 7
   II. Type Certificate Holder Record .............................................................................. 7
   III. Change Record ....................................................................................................... 7
SECTION 1: 214ST

I. General

1. Type/ Model
   1.1 Type 214ST
   1.2 Model 214ST

2. Airworthiness Category
   Large Rotorcraft, Category A and B

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

4. Type Certification Application Date to FAA: not recorded

5. State of Design Authority
   FAA

6. Type Certificate Date by
   FAA: 16 February 1982 (Category B)
   CAA UK: 29 October 1982
   CAA NO: 2 September 1985

7. Type Certificate n° by
   FAA: H105W
   CAA UK: FR17
   CAA NO: 04/85 (Certificate of Type Acceptance)

8. Type Certificate Data Sheet n°
   FAA: H105W
   CAA UK: FR17
   CAA NO: not issued

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
   not recorded

2. Airworthiness Requirements
   FAR Part 29, dated 1 February 1965, Amdts.29-1 through 29-13 and parts of Amdts. 29-14 through 29-16, plus 29.997 Amdt. 29-10 and 29.997 (b) Amdt. 29-17

3. Special Conditions
   CAA UK Special Conditions Report No. 9/31/RY 3201

4. Exemptions
   No. 3342, against FAR 29.1323 (c)

5. Deviations
   none

6. Equivalent Safety Findings
   Critical Decision Point Definition - FAR 29.53(b)

7. Environmental Protection Requirements
   7.1 Noise Requirements
   See TCDSN EASA.IM.R.505

7.2 Emission Requirements
   n/a

9. Operational Suitability Data (OSD)
   Not required for rotorcraft that are no longer in production. CR (EU) 748/2012, as amended by CR (EU) 69/2014 does not require OSD elements for this model (see Article 7a, 1.).

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
2. Description

Main rotor: two MR GFRP blades, elastomeric bearings
Tail rotor: two TR blades
Fuselage: conventional metal structure
Landing gear: skid type
Powerplant: two free turbine engines

3. Equipment

Refer to approved RFM for equipment list

4. Dimensions

4.1 Fuselage
Length: 14.96 m (49 ft 1 in)
Width (skids): 2.75 m (9 ft 8 in)
Height (tail fin): 3.22 m (10 ft 7 in)

4.2 Main Rotor
Diameter: 15.95 m (52 ft 0 in)

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

5. Engine

5.1 Model
General Electric Company
2 x Model CT7-2A

5.2 Type Certificate
FAA TC/TCDS n°: E8NE
EASA TC/TCDS n°: EASA.IM.E.010

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>PWR turbine speed [% (rpm)]</th>
<th>Exhaust gas temperature [°C]</th>
<th>Gas generator speed [% (rpm)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOP (5 min)</td>
<td>100 (2 350)</td>
<td>100 (21 000)</td>
<td>878</td>
<td>101.7 (45 430)</td>
</tr>
<tr>
<td>MCP</td>
<td>83 (1 950)</td>
<td>775</td>
<td>98.3 (43 900)</td>
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<tr>
<td>OEI 2½ min</td>
<td>73.4 (1 725)</td>
<td>915</td>
<td>103 (46 070)</td>
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<td>OEI 30 min</td>
<td>69.1 (1 625)</td>
<td>878</td>
<td>101.7 (45 430)</td>
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<tr>
<td>OEI MCP</td>
<td></td>
<td>840</td>
<td>101.2 (45 240)</td>
<td></td>
</tr>
</tbody>
</table>

3) This ‘emergency rating’ can be used for demonstration/training purposes.

5.3.2 Other Engine and Transmission Torque Limits

6. Fluids

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

6.2 Oil
Engines: GE Spec D50TF1 Type I (above -54 °C) and Type II (above -40 °C)
Gear boxes: MIL-PRF-7808E and subsequent suffixes, or NATO O-148

6.3 Additives
For anti-icing additive see Note 5

7. Fluid capacities

7.1 Fuel
1 666 litres (440 US gal) at STA +243
See Note 2 for data on unusable fuel.

7.2 Oil
7.2 litres (1.9 US gal) at STA +285.5 (for each engine)
Usable oil: 4 litres (1.06 US gal) included in capacity
See Note 2 for data on oil.

7.3 Coolant System Capacity
n/a
8. Air Speed Limitations

$V_{ne} \text{ MSL: } 160 \text{ KIAS}$
See placard P/N 214-175-271
($V_{ne}$ (IAS) varies with pressure altitude and temperature)

9. Rotor Speed Limitations

<table>
<thead>
<tr>
<th>Condition</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power on</td>
<td>287 rpm (100%*)</td>
<td>284 rpm (99%*)</td>
</tr>
<tr>
<td>Power off</td>
<td>301 rpm (105%*)</td>
<td>258 rpm (90%*)</td>
</tr>
</tbody>
</table>

*: Tach reading

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 096 m) DA
10 000 ft (3 048 m) DA for MTOM 7 938 kg (17 500 lb)

-35°C (-31°F) to +52°C (+125°F)

10.2 Temperature

- VFR day/night
- IFR
- Eligible for Category A when operating in accordance with RFM Supplement 8, BHT-214ST-FMS-8.

11. Operating Limitations

7 938 kg (17 500 lb)

12. Maximum Mass

13. Centre of Gravity Range

Longitudinal C.G. limits:

Lateral C.G. limits:
14. Datum

Empty mass C.G. range: See Chapter 8, BHT-214ST-MM

Longitudinal: STA 0 is located 3 391 mm (133.5 in) forward of the forward jack fittings of the fuselage.

15. Levelling Means

Plumb line from top of left main door frame

16. Minimum Flight Crew

IFR: two (2) pilots

See RFM Section 6 for minimum crew station weight

VFR: one (1) pilot in the RH crew seat; LH crew seat may be used for an additional pilot.

Single pilot operations are based on the standard helicopter instrument panel and systems.

17. Maximum Passenger Seating Capacity

eighteen (18)

(not limited by emergency exit requirements)

18. Passenger Emergency Exit

2, one on each side of the cabin

19. Maximum Baggage/ Cargo Loads

748 kg (1 650 lb) at STA 297

20. Rotor Blade Control Movement

For rigging information refer to BHT-214ST-MM

21. Auxiliary Power Unit (APU)

n/a

22. Life-limited Parts

See Airworthiness Limitations, Chapter 4, BHT-214ST-MM

IV. Operating and Service Instructions

1. Flight Manual


BHT-ALL-SRM - Structural Repair Manual


Refer to approved RFM, Section 6

5. Illustrated Parts Catalogue

BHT-214ST-IPB Illustrated Parts Breakdown Manual

6. Miscellaneous Manuals


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 28101 to 28246.

2) The certificated empty weight and corresponding C.G. locations must include:

- 32 lb of engine oil at STA +285.1, and,
- unusable fuel of 5 US gal, 34 lb) at STA +224.2.

3. A partition must not be installed between the passenger and crew compartments that will obstruct the pilot’s view of the passenger large sliding doors and hinged panels. Interior linings must not be installed that obstruct the view of the crew/passenger front doors latch engagement with the fuselage.

4. Composite (fiberglass) main rotor blades (215-015-300) must have conductive paint (a minimum resistance required) for lightning protection.

5. For all operations below 4.44 °C (40°F) ambient temperature, all fuel used in Model 214ST helicopters must contain Phillips PFA-55MB anti-icing additive in concentration 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.

* * *

Data as per TCDS H10SW
SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>GFRP</td>
<td>Glas-Fibre-Reinforced-Plastic</td>
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<tr>
<td>IFR</td>
<td>Instrument Flight Rules</td>
</tr>
<tr>
<td>KIAS</td>
<td>Knots Indicated Air Speed</td>
</tr>
<tr>
<td>MR</td>
<td>Main Rotor</td>
</tr>
<tr>
<td>OSD</td>
<td>Operational Suitability Data</td>
</tr>
<tr>
<td>PWR</td>
<td>Power</td>
</tr>
<tr>
<td>RFM</td>
<td>Rotorcraft Flight Manual</td>
</tr>
<tr>
<td>s/n</td>
<td>Serial Number</td>
</tr>
<tr>
<td>STA</td>
<td>Station</td>
</tr>
<tr>
<td>TR</td>
<td>Tail Rotor</td>
</tr>
<tr>
<td>V(_{\text{NE}})</td>
<td>Never Exceed Speed</td>
</tr>
<tr>
<td>V(_{\text{PWR OFF}})</td>
<td>Power-off Speed (Autorotation)</td>
</tr>
<tr>
<td>V(_{\text{PWR ON}})</td>
<td>Power-on Speed</td>
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II. Type Certificate Holder Record

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<th>Type Certificate Holder</th>
<th>Period</th>
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<tbody>
<tr>
<td>Bell Helicopter Textron Inc.</td>
<td>From 8 November 1984</td>
</tr>
<tr>
<td></td>
<td>until 30 July 2019</td>
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<tr>
<td>P.O. 482 Fort Worth, Texas 76101, USA</td>
<td></td>
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<tr>
<td>Bell Textron Inc.</td>
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<tr>
<td>P.O. 482 Fort Worth, Texas 76101, USA</td>
<td>Until 7 September 2020</td>
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<tr>
<td>Erickson 214 Holdings, LLC</td>
<td></td>
</tr>
<tr>
<td>3100 Willow Springs Road Central Point,</td>
<td></td>
</tr>
<tr>
<td>Oregon 97502-0010, USA</td>
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<tr>
<td>McDermott 214 Holdings, LLC</td>
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<tr>
<td>7400 Oak Hills Court North Richland,</td>
<td></td>
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<tr>
<td>Texas 76182-3284, USA</td>
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<td>From 8 November 2023</td>
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III. Change Record

<table>
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<th>Issue</th>
<th>Date</th>
<th>Changes</th>
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<tr>
<td>Issue 1</td>
<td>15 Mar 2024</td>
<td>Initial issue of EASA TCDS</td>
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