DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

H6SW
Revision 9
McDermott 214 Holdings, LLC
214B
214B-1
November 8, 2023

TYPE CERTIFICATE DATA SHEET NO. H6SW

This data sheet which is part of Type Certificate No. H6SW prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: McDermott 214 Holdings, LLC
7004 Oak Hills Court
North Richland Hills, TX 76182-3284

Type Certificate Holder Record: Erickson 214 Holdings, LLC, transferred TC H6SW to McDermott 214 Holdings, LLC on November 8, 2023

Bell Textron Inc. transferred TC H6SW to Erickson 214 Holdings, LLC on September 8, 2020

Renamed from "Bell Helicopter Textron, Inc." to "Bell Textron, Inc." on July 1, 2019

I - Model 214B (Transport Helicopter Category B), Approved January 27, 1976 – Model 214B-1, (Transport Helicopter – Category B), approved February 3, 1976.

Engine: Lycoming T5508D (Type Certificate Data Sheet E4NE)

Fuel: MIL-T-5624, Grade I, (JP-4), or MIL-T-5624 Grade II (JP-5) (See Note 9) (See Flight Manual for approved vendors)

Engine Limits

----	Output Shaft Torque Percent	Output Shaft Speed RPM. %	Exhaust Gas Temperature º F	Gas General Speed RPM. %
Take-off (5 minute)	100 (2050 SHP)	14,695 (100%)	1,330 (at 130º F AMB)	18, 832 (100.6%)
Maximum Continuous	90 (1850 SHP)	14, 695 (100%)	1, 278 (at 130º F AMB)	18, 327 (97.9%)

Rotor Limits

Power Off	Power On
Maximum 315 RPM (Tach reading 105%)	Maximum 300 RPM (Tach reading 100%)
Maximum 257 RPM (Tach reading 86%)	Minimum 294 RPM (Tach reading 98%)

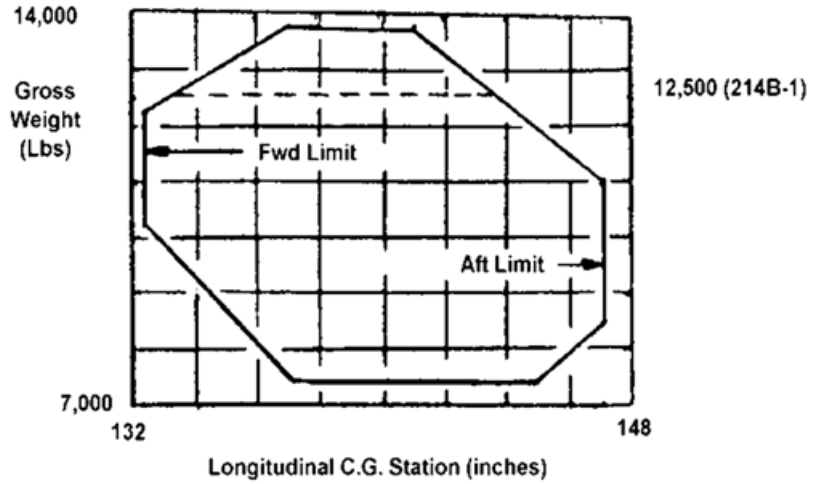
Airspeed Limits: See Placard P/N 214-075-256
(V_{NE} (IAS) varies with pressure altitude and temperature)

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CG Range

(a) Longitudinal CG limits
(+137.0) to (+141) at 13,800 lbs.
(+132.5) to (+144.3) at 12,500 lbs.
(+132.5) to (+147) at 11,000 lbs.
(+132.5) to (+147) at 10,250 lbs.
(+135.4) to (+147) at 8,500 lbs.
(+137) to (+145) at 7,500 lbs.

Straight-line variation between points given. See figure:



(b) Lateral C.G. limits
4.0 inches left of centerline
4.7 inches right of centerline

Empty Weight C.G. Range

See Chapter 8, Model 214B series Maintenance Manual

Maximum Weight

12,500 lbs. for 214B-1 (See Note 10)
13,800 lbs. for 214B
16,000 lbs. for 214B and 214B-1 external cargo operation (See Note 4)

Minimum Crew

1 (pilot)

Maximum Passengers

15 (Not limited by emergency exit requirements)

Maximum Baggage

None (No baggage compartment)

Fuel Capacity

204 gal. (+153.8) usable. See Note 1 for data on unusable fuel.

Oil Capacity

3.75 gal. (+195.0) 1.85 gal. usable (included in cap). See Note 1 for undrainable oil.

Rotor Blade and Control Movement

For rigging information refer to 214B series Maintenance Manual.

Serial Nos. eligible

27001 and 28001 and up

Datum

Station 0 datum is located 20 inches aft of the most forward point of the fuselage nose section.

Leveling means

Plumb line from top of left main door frame.

Certification Basis

FAR Part 29, dated February 1, 1965, (Transport Category B) Amendments 29-1 through 29-9 and Amendment 29-11. Special conditions No. 26-65-SW-5.

No exemptions.

Type Certificate No. H6SW issued January 27, 1976.
Date of application for Type Certificate October 26, 1972.

Production Basis

Production Certification No. 100

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations, (see Certification Basis), must be installed in each type of helicopter for certification. In addition, the following items of equipment are required with each helicopter as specified:

FAA approved Helicopter Flight Manual
1) Model 214B, dated January 27, 1976.
2) Model 214B-1, dated February 2, 1976.

NOTE 1. A current weight and balance report including list of equipment included in 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 9.2 lbs. (+195.0) and unusable fuel of 25.2 lbs. (+140.0).

NOTE 2. The following placards must be display in front of and in clear view of the pilot: “This Helicopter must be operated in compliance with the operating limitations specified in the FAA Approved Rotorcraft Flight Manual must be complied with.”

All placards required in the Approved Helicopter Flight Manual must be installed in the appropriate locations. Chapter 11 of the Maintenance Manual includes information about other placards and their locations.

NOTE 3. The retirement times of certain parts and inspection requirements are listed in Airworthiness limitations, Chapter 4, of the Model 214B/214B-1 series Maintenance Manual. These limitations may not be changed without FAA engineering approval. In addition, information essential for proper maintenance of the helicopter is contained in the Bell Helicopter Company Model 214B/214B-1 Maintenance Manual and in the 214B/214B-1 series Component Repair and Overhaul Manual.

NOTE 4. Model 214B/214B-1 helicopters equipped with 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 16,000 pounds gross weight in accordance with the limits of FAA Approved model 214B Helicopter Flight Manual, dated January 27, 1976, and Model 214B-1 Manual, dated February 2, 1976. The requirement times referenced in Note 3 are not changed. Gross weights above 13,800 lbs. must not be imposed on the landing gear.

NOTE 5. 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.

NOTE 6. VHF navigation installations are limited to Collins Radio Type VIR31H, P/N 622-2819-004 due to rotor modulation interference. Other VHF navigation installations must be coordinated through FAA, Southwest Region, Engineering and Manufacturing Branch, ASW-210.

NOTE 7. 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 the takeoff 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.

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

NOTE 9. For all operations below 40ºF ambient temperature, all fuel used in Model 214B helicopters must contain Phillips PFA-55MB anti-icing additive in concentrations of not lets 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.

NOTE 10. Except for a difference in maximum weight, the Model 214B and 214B-1 are identical to each other.

NOTE 11. Composite (fiberglass) main rotor blades (215-015-500 or 214-018-402) must have conductive paint (a minimum resistance required) for lightning protection.

NOTE 12. Any changes to the type design of this helicopter by mains of amended type certificate (TC), supplemental type certificate (STC), or amended STC, requiring instructions for continued airworthiness (ICA’s) must be submitted thru the project aircraft certification office (ACO) for review and acceptance by the Fort Worth-Aircraft Evaluation Group (FTW-AEG) Flight Standards district Office (FSDO) prior to the aircraft delivery, or upon issuance of the first standard airworthiness certificate for the affected aircraft, whichever occurs later as prescribed by the Title 14 CFR 21.50. Type design changes by means of a FAA Form 337 (field approval) that require ICA’s must have those ICA’s reviewed by the field approving FSDO.

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