DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

H10SW
Revision 7
Bell
214ST

October 16, 2007

TYPE CERTIFICATE DATA SHEET NO. H10SW

This data sheet which is part of Type Certificate No. H10SW 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: Bell Helicopter Textron, Inc.
Subsidiary of Textron, Inc.
P.O. Box 482
Fort Worth, Texas 76101

Model 214ST (Transport Helicopter - Category B), Approved February 16, 1982 (Transport Category A Approved November 8, 1984).

Engine: Two General Electric CT 7-2A or T700/T2C (Type Certificate Data Sheet No. E8NE)

Fuel: MIL-T-5624, Grade I, (JP-4), or MIL-T-5624 Grade II (JP-5) (See Note 6) (See Flight Manual for approved vendors)

Engine Operating Limits
(Normal Operation)

	Output Shaft Torque Percent	Power Turbine Speed %, RPM	Exhaust Gas Temp °F	Gas Gen. Speed %, RPM
Takeoff(5 minutes)	100% (2350 SHP)	100% (21,000)	878°C	101.7% (45,430)
Maximum Continuous	83% (1950 SHP)	100% (21,000)	775°C	98.3% (43,900)
One Engine Inoperative				
2 1/2 Min Power	73.4% (1725 SHP)	100% (21,000 RPM)	915°C	103% (46,070 RPM)
30 Min Power	69.1% (1625 SHP)	100% (21,000 RPM)	878°C	101.7% (45,430 RPM)
Continuous (See Note 7)	69.1% (1625 SHP)	100% (21,000 RPM)	840°C	101.2% (45,240 RPM)

Rotor limits

Power Off	Power On
Maximum 301 rpm	Maximum 287 rpm
(Tach reading 105%)	(Tach reading 100%)
Minimum 258 rpm	Minimum 284 rpm
(Tach reading 90%)	(Tach reading 99%)

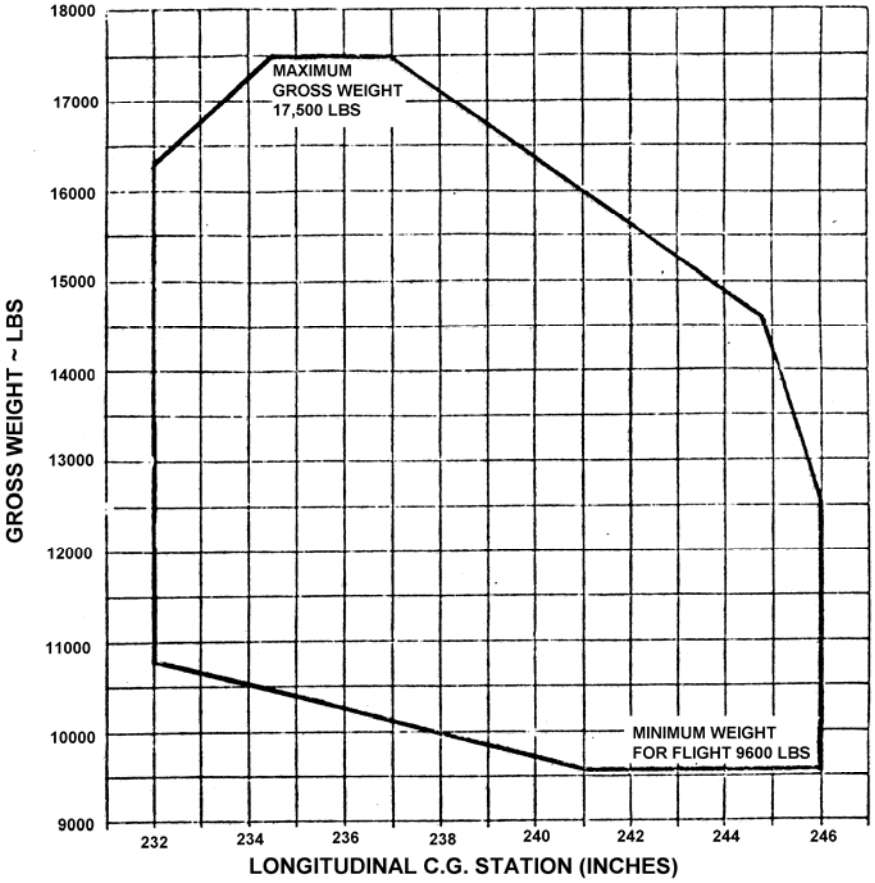
Airspeed limits

See indicator P/N 214-175-271
(V_{ne} (IAS) varies with pressure altitude and temperature)

C.G. range

(a) Longitudinal C.G. limits
(+232.0) at 16,300 lbs.
(+234.5) to (+237) at 17,500 lbs.
(+244.8) at 14,700 lbs.
(+246.0) at 12,500 lbs.
(+246.0) to (241.0) at 9,600 lbs.
(+232.0) at 10,800 lbs.

Straight line variation between points given. See figure:



(b) Lateral C.G. limits
± 2.5 inches for 13,500 lbs. and below
± 1.0 inches at 16,500 lbs. gross weight
± 1.0 inches at 17,500 lbs. gross weight

Straight line variation between points given.

Empty Weight

C.G. range	See Chapter 8, Model 214B series Maintenance Manual
Maximum weight	17,500 lbs.
Minimum crew	IFR – Two helicopter pilots. **NOTE** Refer to section 6 for minimum crew station weight VFR – One helicopter pilot who shall operate the helicopter from the right crew seat. The left crew seat may be used for an additional pilot. **NOTE** Single pilot operations are based on the standard helicopter instrument panel and systems.
Maximum passengers	18 (Not limited by emergency exit requirements)
Maximum baggage	1650 lbs. at F.S. 297
Fuel capacity	440 gal. (+243) capacity. See Note 1 for data on unusable fuel.
Oil capacity	1.9 gals. (+285.5) 1.06 gal. usable (included in cap). See Note 1 for undrainable oil.
Rotor blade and control	For rigging information refer to the Model 214ST series Maintenance Manual.
Serial Nos. eligible	28101 and up
Datum	Station 0 (datum) is located 133.5 inches forward of the forward jack fittings of the fuselage.
Leveling means	Plumb line from top of left main door frame.
Certification basis	FAR Part 29 dated February 1, 1965 Amendments 29-1 through 29-16 and IFR standards dated December 15, 1978. Exemption No. 3342, against FAR 29.1323(c)
Production basis	Production Certificate No. 100
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification basis) must be installed in the helicopter for certification. In addition, the following items of equipment are required with each helicopter as specified: FAA approved Helicopter Flight Manual dated February 12, 1982 FAA approved Helicopter Flight Manual Supplement 8 for Category A. See Note 9.

NOTE 1. 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 32 lbs. of engine oil at +285.1 and unusable fuel of 5 gal. (34 lbs.) at +224.2.

NOTE 2. The following placard must be displayed 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. The Airworthiness Limitations Section of the Rotorcraft Maintenance Manual must be complied with."

All placards required in the Approved Helicopter Flight Manual must be installed in the appropriate locations. Chapter II 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 214ST 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 214ST Maintenance Manual and in the 214ST series Component Repair and Overhaul Manual.

NOTE 4. 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 5. Composite (fiberglass) main rotor blades (215-015-300) must conductive paint (a minimum resistance required) for lightning protection.

NOTE 6. For all operations below 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.

NOTE 7. This emergency rating can be used for demonstration/training purposes.

NOTE 8. Equivalent Safety Finding was determined for Critical Decision Point Definition - FAR 29.53(b).

NOTE 9. Model 214ST helicopters are eligible for Category A when operating in accordance with the procedures and limitations of FAA Approved Model 214ST RFM Supplement 8.

NOTE 10. Any changes to the type design of this helicopter by means 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 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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