

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A14SW
Revision 11
Textron Aviation
MU-300

October 12, 2016

TYPE CERTIFICATE DATA SHEET NO. A14SW

This data sheet which is a part of Type Certificate No. A14SW 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 Textron Aviation Inc.
One Cessna Boulevard
Wichita, KS 67215

Type Certificate Holder Record: Mitsubishi Heavy Industries, Inc. Ltd..
Tokyo, Japan transferred to
Raytheon Aircraft Company

Raytheon Aircraft Company transferred to
Hawker Beechcraft Corporation on March 26, 2007.

Hawker Beechcraft Corporation transferred to
Beechcraft Corporation on April 12, 2013.

Beechcraft Corporation transferred to
Textron Aviation Inc. on October 12, 2016

I. Model MU-300, Diamond I and IA (Transport Category), Approved November 6, 1981 (See NOTE 8 and 9).

Engines Two Pratt and Whitney Aircraft of Canada, Ltd. JT15D-4 or JT15D-4D turbofans
(NOTE 4)

Fuel Commercial kerosene Jet A, Jet A-1, Jet B, or JP-4
Fuels not containing icing inhibitors must have MIL-I-27686D fuel system icing
inhibitor added in amounts of not less than 0.10% or more than 0.15% by volume.
See Airplane Flight Manual for blending anti-icing additive to fuel.

Engine Limits Static thrust standard day, sea level:

	<u>JT15D-4</u>	<u>JT15D-4D</u>
Take-off (5 minutes)	2,500 lb.	2,500 lb.
Max Continuous	2,375 lb.	2,375 lb.
Maximum permissible engine rotor operating speeds:		
N ₁ (Fan)	104%	104%
	16,540 rpm	16,540 rpm
N ₂ (Gas Gen.)	96%	97%
	31,450 rpm	31,800 rpm
Maximum permissible interturbine gas temperatures:		
Take-off	700°C	720° C
Maximum Continuous	680°C	680°C
Starting Transient (2 seconds)	700°C	700°C

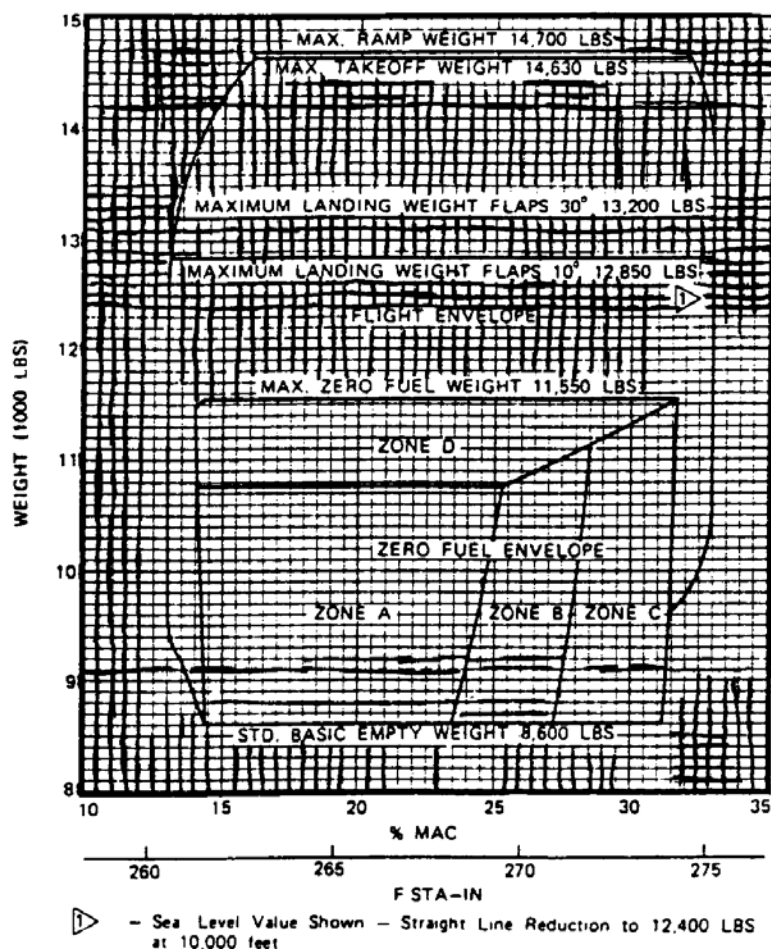
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I. Model MU-300 (cont'd).

Airspeed Limits (IAS)

V_{MO}	Maximum Operating	
	Sea level to 14,000 ft	264 knots
	17,000 ft to 26,000 ft.	320 knots
M_{MO}	Above 26,000 ft.	0.785 Mach
V_A	Sea level to 20,000 ft.	205 knots
	At 41,000 ft.	230 knots
V_{FE}	Flaps Extended	
	30°	165 knots
	10°	200 knots
V_{MCA}	(Min. control speed) Air	89 knots
V_{MCG}	(Min. control speed) Ground	90 knots
V_{LO}	(Landing gear operating)	200 knots
V_{LE}	(Landing gear extended)	200 knots
V_{SB}	(Speed brakes extended)	
	No limit, except in flight when flaps are more than 10°.	
Zone A	Fuel may be loaded in any tank combination.	
Zone B	Fuel may be loaded in the main tanks and up to 400 lbs in the fuselage tank.	
Zone C	Fuel may be loaded in the main tank only.	
Zone D	Load main tanks first, the remainder in fuselage tank.	

C.G. Range (Landing Gear Extended)



I. Model MU-300 (cont'd).

Other Operating Limitations See FAA Approved Airplane Flight Manual.

Control Surface Movements	Spoiler inboard	Up	68°	Down	14°
	Spoiler outboard	Up	72°	Down	14°
	Lateral Trim	Up	25°	Down	25°
	Elevator	Up	25°	Down	12°
	Pitch Trim	L.E. Up	121.3	L.E. Down	12.8
	Rudder	Right	30°	Left	30°
	Rudder Trim	Right	24°	Left	24°
	Flap	Full	30°		
	Speed brake		36°		
	Yaw Damper	Right	26.6°	Left	27.6°

See Mitsubishi drawing 45A00601 or maintenance manual for rigging tolerance.

Length of the trim actuator jack screw in millimeters (mm)

See Mitsubishi drawing for details.

Serial Nos. Eligible A003S.A. through A091S.A (See NOTE 8)

Certification Basis Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by 25-1 through 25-40, plus 25.1351(d), 25.1353(c)(5), and 25.1450 of Amendment 25-41; FAR 25.1353(c)(6) and FAR 25.255 of Amendment 25-42; and FAR 25.361(b) of Amendment 25-46. Part 36 of the Federal Aviation Regulations effective December 1, 1969, as amended by 36-1 through 36-12.

Equivalent Safety Items

- (1) Out-of-trim characteristics FAR 25.255
- (2) Pilot compartment view FAR 25.773(b)(2)

Application for Type Certification dated August 24, 1977.

Type Certificate No. A14SW issued November 6, 1981. See NOTE 9.

Maximum Weight	Takeoff	14,630 lb.	
	Landing	13,200 lb Flaps 30°	12,800 lb Flaps 10°
	Zero Fuel	11,550 lb	
	Ramp	14,700 lb	

Maximum Baggage	Aft Cabin	400 lb. (at +313.4)
		200 lb. (at +296.4)
	Tailcone	250 lb. (at +383.1)

Oil Capacity (gal.) Two engine mounted tanks:
Total 2.33 each; usable 1.50 each
ARM = +342.2
See NOTE 1 for data on undrainable oil.

Number of Seats 11 (2 pilots and 9 passengers) See NOTE 5.

Fuel Capacity (gal.)	Total	Usable	Arm
Two wing tanks	265.6 ea.	259.3 ea.	+272.2
One aft fuselage tank	121.6	11.72	+337.3
See NOTE 1 for data on unusable fuel.			

I. Model MU-300 (cont'd).

Production Basis	None. (See NOTE 8).
Datum	71.65 in. forward of the front face of the forward pressure bulkhead.
MAC	73.11 in. (L.E. of MAC at +251.09).
Leveling Means	Seat rails
Minimum Crew	For all flights: 2 persons (pilot and co-pilot)
Maximum Operating Altitude	41,000 ft.
Required Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the aircraft for certification. Mitsubishi Aircraft International (MAI) Report MR-0689 contains list of all required equipment as well as optional equipment installations approved by FAA.

NOTE 1 Current weight and balance report including list of equipment included in certificated empty weight and loading instructions when necessary must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity location must include:

Unusable fuel (Two wing tanks)	89.1 lb at +255.9
Unusable fuel (One after fus. tank)	29.6 lb at +338.8
Undrainable Oil (two engine)	3.0 lb at +342.2
Hydraulic fluid	8.3 lb at +349.6

NOTE 2 The aircraft must be operated according to the following FAA Approved Airplane Flight Manuals: MAI Report MR-0460 dated 11-6-81 for Serial Nos. A003S.A through A065S.A, A067S.A., and A068S.A. MAI Report MR-0873 dated 1-11-84 for Serial Nos. A066S.A., A069S.A. through A091S.A., and those modified by Service Recommendation SR 71-001.

NOTE 3 The Airworthiness Limitations Section MR-11-00 of the Maintenance Requirements Report MR-0464-2 contains overhaul times, replacement times, and special inspections required for continued airworthiness.

NOTE 4 Pratt and Whitney Aircraft of Canada, Ltd. JT15D-4D turbofan engines used for Mitsubishi Serial Nos. A066S.A. and A069S.A. through A091S.A. may be installed per MAI Service Recommendation SR 71-001 for S/N's A003S.A. through A065S.A., A067S.A. and A068S.A.

NOTE 5 The toilet seat installed per MAI Drawing 45A91812 is approved for takeoff and landing as a passenger seat provided a curtain is installed in place of the sliding door per MAI Drawing 45A91793 and interior is approved per MAI Report MR0511, Revision B. Utilization of Toilet Seat for takeoff and landing is covered by Flight Manual Section 7.

NOTE 6 Serial Nos. A003S.A. through A065S.A., A067S.A. and A068S.A. may use Pratt and Whitney Canada JT15D-4D loaner engines when installed per MAI Service Bulletin SB 71-001 and operated to JT15D-4 limits per the applicable Airplane Flight Manual (engines may be interchanged in any combination).

NOTE 7 DELETED

NOTE 8 MU-300 with serial numbers A003S.A. thru A058S.A. and A060S.A. were manufactured by Mitsubishi Aircraft International, Inc., under Approved Production Inspection System. Serial Numbers A059S.A. and A061S.A. through A091S.A. were manufactured under FAA Production Certificate No. 4SW.

NOTE 9 Refer to Type Certificate Data Sheet No. A16SW for MU-300-10, Serial Numbers A1001S.A. through A1011S.A. These aircraft originally produced under this type certificate are now under Type Certificate No. A16SW. This note reflects a split in the original type certificate for administrative purposes.

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