

A10SW
Revision 17

Mitsubishi
MU-2B-25
MU-2B-35
MU-2B-26
MU-2B-36
MU-2B-26A
MU-2B-36A
MU-2B-40
MU-2B-60

October 9, 2009

Type Certificate Holder: Mitsubishi Heavy Industries, Ltd. (see Note 5.)
16-5, KONAN 2-CHOME, MINATO-KU
TOKYO, 108-8215
JAPAN

MU-2B-25, 6 to 9 PCLM (Normal Category) Approved January 20, 1976

Fuel	Fuels as designated: Aviation Turbine Fuel ASTM D1655-68T Types Jet A, Jet A-1, and Jet B MIL-T-5624G-1 Turbine Fuel: Grades JP-4 and JP-5 MIL-T-5616-1 Fuel; Grade JP-1 MIL-F-46005A (MR) -1; Type I and II D. Eng. R.D. 2482; Issue No. 2 D. Eng. R.D. 2486; Issue No. 2 D. Eng. R.D. 2494; Issue No. 4 MIL-G-5572D; Grade 80/87 Octane Aviation Gasoline (as emergency fuel only) ASTM D910 Aviation Gasoline Grade 100LL (as an emergency fuel only)
------	---

Oil	Oils conforming to MIL-L-23699
-----	--------------------------------

Static Sea Level Rating (I.S.A.)

	Shaft Horsepower (SHP)	Propeller Shaft Speed (%)*	Maximum Permissible Interstage Turbine Temperature (°C)
Takeoff (5 min.)	665	100	923
Maximum continuous	665	100	923
Starting transient (1 sec.)			1149

At low altitude and low ambient temperature, the engines may produce more power than that for which the aircraft has been certificated. Under these conditions, the placarded torque meter limitations shall not be exceeded.

*The maximum allowable propeller shaft speed is 106% for a transient period not to exceed 5 seconds, and 101% continuous. 100% propeller shaft speed is defined as 2,000 RPM.

MU-2B-25 (cont'd)

Propeller and Propeller 2 Hartzell HC-B3TN-5(C or E or M)/T10178(N)B -11 with 3 blades each, or 2 Hartzell

[illegible]

Limits.

HC-B3TN-5(C or E or M)/T10178(N)B -11R with 3 blades each. See note 7 and 10.

Diameter: 90-3/8 inches

Pitch setting at 30 in. Station

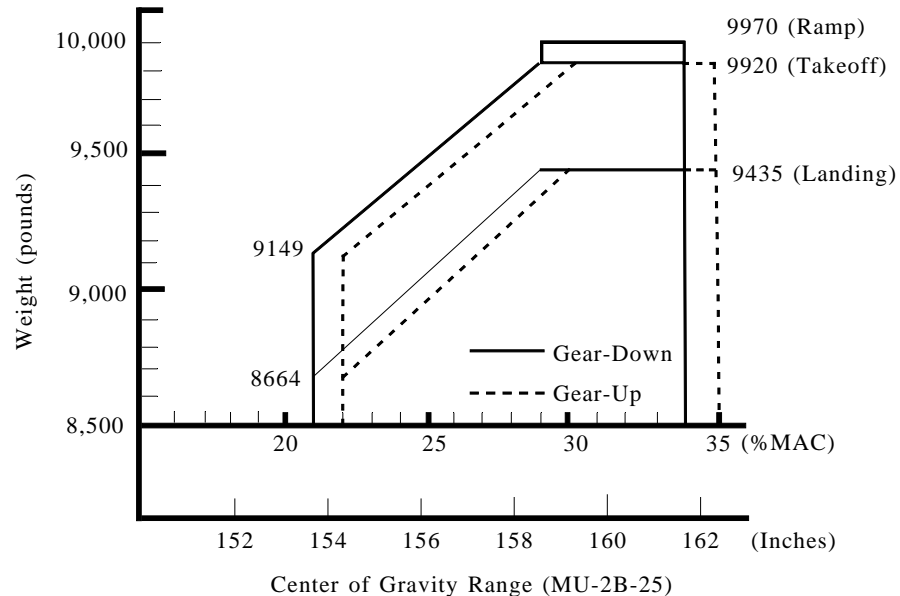
Flight Idle	12°
Feathered	87° ± 0.5°
Reverse	-6.5°

Airspeed Limits (CAS)

V_{mo} (Maximum Operating): 250 knots (287 mph)
 Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for M_{mo} = .57 M

V _p (Maneuvering)	: 181 knots (287 mph)
V _{fe} (Flaps extended)	
Flap 5°	: 175 knots (201 mph)
Flap 20°, 40°	: 140 knots (161 mph)
V _{lo} (Landing gear operating)	: 160 knots (184 mph)
V _{le} (Landing gear extended)	: 162 knots (187 mph)
V _{mc} (Minimum control)	: Flap 5°
	100 knots (115 mph)
	Flap 20°
	93 knots (107 mph)

C.G. Range



Ramp & Takeoff C.G. Ranges	Forward		Aft		Weight Pounds
	In.	%MAC	In.	%MAC	
Gear Up	+154.3	22	+162.2	35	9149
Condition	+159.2	30	+162.2	35	9920
Gear	+153.8	21	+161.6	35	9149
Down	+158.6	29	+161.6	34	9920
Condition	+158.6	29	+161.6	34	9970

MU-2B-25 (cont'd)

Landing C.G. Ranges	Forward		Aft		Weight Pounds
	In.	%MAC	In.	%MAC	
Gear Up	+154.3	22	+162.2	35	8664
Condition	+159.2	30	+162.2	35	9435
Gear Down	+153.8	21	+161.6	34	8664
Condition	+158.6	29	+161.6	34	9435

Straight line variation between points given.

Moment change due to gear retraction is +6738 In-Lbs.

Maximum zero fuel weight - 9435 lbs.

Maximum Weight

Ramp: 9,970 lbs.
Takeoff: 9,920 lbs.
Landing: 9,435 lbs.

No. of Seats

Maximum 9 (Pilot at +97.2)
See loading instructions for passenger loading.

Maximum Baggage

574 lbs. (200 lbs. at +205.1) (220 lbs. at +230.7)
(154 lbs. at +253.2)

Fuel Capacity

	<u>Total Cap</u>	<u>Usable</u>
Wing Tank	159 gal. (+167.3)	154 gal.
Outer Tank (2 at 15 gal. ea.)	30 gal. (+163.4)	30 gal.
Tip Tank (2 at 93 gal. ea.)	186 gal. (+155.9)	180 gal.
Total	375 gal.	364 gal.

Fuel weights are based on 6.5 lbs./gal.

Fuel Usage Procedure

The fuel quantity of each tip tank must not be more than 65 gallons before landing.

Oil Capacity

Total 3.1 gal. (1.55 gal. each tank)
(+138.7)

Maximum Operating Altitude

25,000 ft.

Control Surface Movements

Spoiler	Up	60°		
Aileron Trim	Up	20°	Down	20°
Elevator	Up	33°	Down	10°
Elevator Tab	Nose Up	30°	Nose Down	1° (See Note 8)
Rudder	Right	25°	Left	22°
Rudder Tab	Right	25°	Left	25°
Flap Outboard			Down	40°
Flap Inboard			Down	40°

Serial Nos. Eligible

MU-2B-25 313 S.A.

Model MU-2B-35, 8 to 11 PCLM (Normal Category) approved January 20, 1976

Engines

2 Honeywell (AiResearch / Garrett) TPE331-6-251M
Propeller-shaft to engine-rotor ratio 1: 20.865

Model MU-2B-35 (cont'd)

Fuel

Fuels as designated

Aviation Turbine Fuel ASTM D1655-68T
 Types Jet A, Jet A-1, and Jet B
 MIL-T-5624G-1 Turbine Fuel; Grades JP-4 and JP-5
 MIL-F-5616-1 Fuel; Grade JP-1
 MIL-F-46005A (MR) - 1; Type I and II
 D. Eng. R.D. 2482; Issue No. 2
 D. Eng. R.D. 2486; Issue No. 2
 D. Eng. R.D. 2494; Issue No. 4
 MIL-G-5572D; Grade 80/87 Octane Aviation
 Gasoline (as emergency fuel only)
 ASTM D910 Aviation Gasoline Grade 100LL (as an emergency fuel only)

Oil

Oils conforming to MIL-L-23699

Engine Limits

	Shaft Horsepower (SHP)	Propeller Shaft Speed (%)*	Maximum Permissible Interstage Turbine Temperature (°C)
Takeoff (5 min.)	665	100	923
Maximum continuous	665	100	923
Starting transient (1 sec.)			1149

At low altitude and low ambient temperature, the engines may produce more power than that for which the aircraft has been certificated. Under these conditions, the placarded torque meter limitations shall not be exceeded.

*The maximum allowable propeller shaft is 106% for a transient period not to exceed 5 seconds, and 101% continuous. 100% propeller shaft speed is defined as 2,000 rpm.

Propeller and Propeller Limits

2 Hartzell HC-B3TN-5(C or E or M)/T10178(N)B -11 with 3 blades each or 2 Hartzell HC-B3TN-5(C or E or M)/T10178(N)B -11R with 3 blades each. See Note 7 and 10.

Diameter: 90-3/8 inches

Pitch setting at 30 in. station

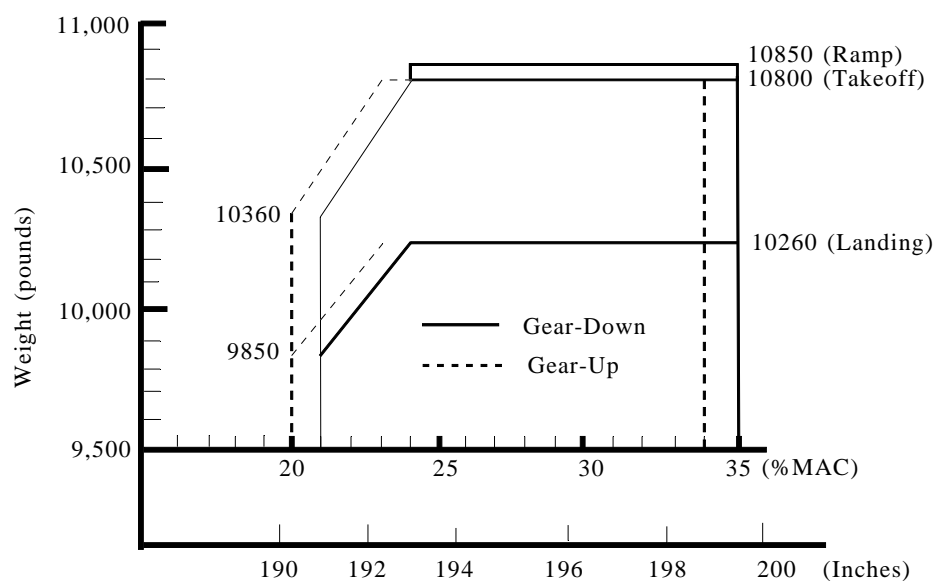
Flight Idle	12°
Feathered	87° ± 0.5°
Reverse	-6.5°

Airspeed Limits (CAS)

V_{mo} (Maximum Operating): 250 knots (287 mph)
 Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for M_{mo} = .57 M

V _p (Maneuvering)	: 188 knots (216 mph)
V _{fe} (Flaps extended)	
Flap 5°	: 175 knots (201 mph)
Flap 20°, 40°	: 146 knots (168 mph)
V _{lo} (Landing gear operating)	
Retract	: 170 knots (195 mph)
Extend	: 170 knots (195 mph)
V _{le} (Landing gear extended)	: 170 knots (195 mph)
V _{mc} (Minimum control)	
Flap 5°	: 99 Knots (114 mph)
Flap 20°	: 90 Knots (104 mph)

MU-2B-35 C.G. Range



Ramp & Takeoff C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up	+190.3	20	+198.8	34	10360
Condition	+192.1	23	+198.8	34	10800
Gear	+190.9	21	+199.4	35	10360
Down	+192.8	24	+199.4	35	10800
Condition	+192.8	24	+199.4	35	10850

Landing C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up	+190.3	20	+198.8	34	9850
Condition	+192.1	23	+198.8	34	10260
Gear Down	+190.9	21	+199.4	35	9850
Condition	+192.8	24	+199.4	35	10260

Straight line variation between points given.

Moment change due to gear retraction is -6556 in.-lbs.

Maximum zero fuel weight - 9950 lbs.

Maximum weight Ramp: 10,850 lbs.
 Takeoff: 10,800 lbs.
 Landing: 10,260 lbs.

Number of seats Maximum 11 (pilot at +97.2)
 See loading instructions for passenger loading.

Maximum baggage 600 lbs. at +286.8

Fuel capacity	<u>TOTAL CAP</u>	<u>USABLE</u>
Wing tank	159 gal. (+204.5)	154 gal.
Outer tank (2 at 15 gal. ea.)	30 gal. (+201.0)	30 gal.
Tip tank (2 at 93 gal. ea.)	186 gal. (+193.1)	180 gal.
Total	375 gal.	364 gal.

Fuel weights are based on 6.5 lbs./gal.

MU-2B-35 (cont'd)

Fuel Usage Procedure The fuel quantity of each tip tank must not be more than 65 gallons before landing.

Oil capacity Total 3.1 gal. (1.55 gal. each tank) (+175.9)

Maximum Operating Altitude 25,000 ft.

Control Surface Movements	Spoiler	Up	60°		
	Aileron Trim	Up	20°	Down	20°
	Elevator	Up	28°	Down	12°
	Elevator Tab	Nose Up	30°	Nose Down	1° (See Note 8)
	Rudder	Right	24°	Left	22°
	Rudder Tab	Right	25°	Left	25°
	Flap Outboard			Down	40°
Flap Inboard			Down	40°	

Serial Nos. Eligible MU-2B-35 None

Model MU-2B-26, 6 to 9 PCLM (Normal Category) approved March 9, 1976

Engines 2 Honeywell (AiResearch / Garrett) TPE331-6-251M
Propeller-shaft to engine-rotor ratio 1 : 20.865

Fuel Fuels as designated:

Aviation Turbine Fuel ASTM D1655-68T
Types Jet A, Jet A-1 and Jet B
MIL-T-5624G-1 turbine fuel: Grades JP-4 and JP-5
MIL-F-5616-1 Fuel; Grade JP-1
MIL-F-46005A (MR) -1; Types I and II
D. Eng. R.D. 2482; Issue No. 2
D. Eng. R.D. 2486; Issue No. 2
D. Eng. R.D. 2494; Issue No. 4
MIL-G-5572D; Grade 80/87 Octane Aviation
Gasoline (as emergency fuel only)
ASTM D910 aviation gasoline grade 100LL (as emergency fuel only)

Oil Oils conforming to MIL-L-23699

Engine Limits Static Sea Level Rating (I.S.A.)

	Shaft Horsepower (SHP)	Propeller Shaft Speed (%)*	Maximum Permissible Interstage Turbine Temperature (°C)
Takeoff (5 min.)	665	100	923
Maximum continuous	665	100	923
Starting transient (1 sec.)			1149

At low altitude and low ambient temperature, the engines may produce more power than that for which the aircraft has been certificated. Under these conditions, the placarded torque meter limitations shall not be exceeded.

*The maximum allowable propeller shaft speed is 106% for a transient period not to exceed 5 seconds, and 101% continuous. 100% propeller shaft speed is defined as 2,000 rpm.

Model MU-2B-26 (cont'd)

Propeller and Propeller Limits

2 Hartzell HC-B3TN-5(C or E or M)/T10178(N)B -11 with 3 blades each, or 2 Hartzell HC-B3TN-5(C or E or M)/T10178(N)B -11R with 3 blades each. See Note 7 and 10.

Diameter: 90-3/8 inches

Pitch setting at 30 in. Station

Flight Idle	$12^{\circ} \pm 0.1^{\circ}$
Feathered	$87^{\circ} \pm 0.5^{\circ}$
Reverse	-6.5°

Airspeed Limits (CAS)

V_{mo} (maximum operating) : 250 knots (287 mph)
Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for M_{mo} = .57

V_p (Maneuvering) : 182 knots (209 mph)

V_{fe} (Flaps extended)

Flap 5° : 175 knots (201 mph)

Flap 20°, 40° : 155 knots (178 mph)

V_{lo} (Landing gear operating) : 170 knots (196 mph)

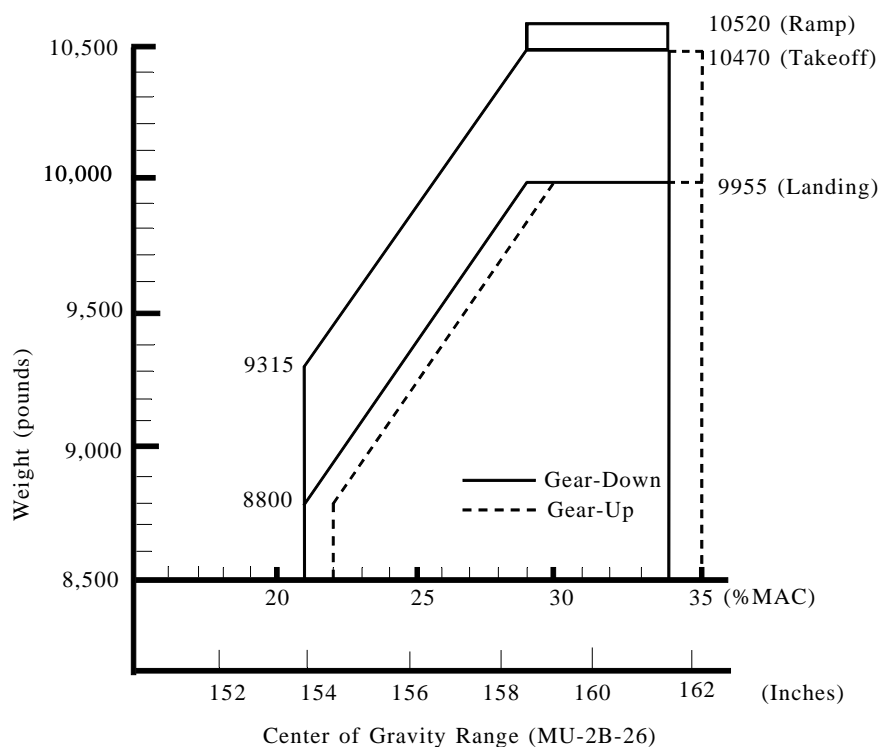
V_{le} (Landing gear extended) : 170 knots (196 mph)

V_{mc} (Minimum control) : Flap 5°

100 knots (115 mph)

Flap 20°

93 knots (107 mph)



Model MU-2B-26 (cont'd)

Ramp & Takeoff C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up	+154.3	22	+162.2	35	9315
Condition	+159.2	30	+162.2	35	10470
Gear	+153.7	21	+161.6	34	9315
Down	+158.6	29	+161.6	34	10470
Condition	+158.6	29	+161.6	34	10520

Landing C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up	+154.3	22	+162.2	35	8800
Condition	+159.2	30	+162.2	35	9955
Gear Down	+153.7	21	+161.6	34	8800
Condition	+158.6	29	+161.6	34	9955

Straight line variation between points given.

Moment change due to gear retraction is +6738 in-lbs.

Maximum zero fuel weight - 9700 lbs.

Maximum weight	Ramp: 10,520 lbs. Takeoff: 10,470 lbs. Landing: 9,955 lbs.																																
No. of seats	Maximum 9 (maximum operating altitude 25,000 ft.) (pilot at +97.2) Maximum 7 (maximum operating altitude 28,000 ft.) (pilot at +97.2) See loading instructions for passenger loading.																																
Maximum baggage	574 lbs. (200 lbs. at +201.5) (220 lbs. at +230.7) (154 lbs. at +253.2)																																
Fuel capacity	<table><tr><td></td><td><u>TOTAL CAP</u></td><td><u>USABLE</u></td></tr><tr><td>Wing tank</td><td>159 gal. (+167.3)</td><td>154 gal.</td></tr><tr><td>Outer tank (2 at 15 gal. ea.)</td><td>30 gal. (+163.4)</td><td>30 gal.</td></tr><tr><td>Tip tank (2 at 93 gal. ea.)</td><td>186 gal. (+155.9)</td><td>180 gal.</td></tr><tr><td>Total</td><td>375 gal.</td><td>364 gal.</td></tr></table> <p>Fuel weights are based on 6.5 lbs./gal.</p>		<u>TOTAL CAP</u>	<u>USABLE</u>	Wing tank	159 gal. (+167.3)	154 gal.	Outer tank (2 at 15 gal. ea.)	30 gal. (+163.4)	30 gal.	Tip tank (2 at 93 gal. ea.)	186 gal. (+155.9)	180 gal.	Total	375 gal.	364 gal.																	
	<u>TOTAL CAP</u>	<u>USABLE</u>																															
Wing tank	159 gal. (+167.3)	154 gal.																															
Outer tank (2 at 15 gal. ea.)	30 gal. (+163.4)	30 gal.																															
Tip tank (2 at 93 gal. ea.)	186 gal. (+155.9)	180 gal.																															
Total	375 gal.	364 gal.																															
Fuel Usage Procedure	The fuel quantity of each tip tank must not be more than 65 gallons before landing.																																
Oil Capacity	Total 3.1 gal. (1.55 gal. each tank) (+138.7)																																
Maximum Operating Altitude	28,000 ft.																																
Control Surface Movements	<table><tr><td>Spoiler</td><td>Up</td><td>60°</td><td></td></tr><tr><td>Aileron Trim</td><td>Up</td><td>20°</td><td>Down 20°</td></tr><tr><td>Elevator</td><td>Up</td><td>33°</td><td>Down 10°</td></tr><tr><td>Elevator Tab</td><td>Nose Up</td><td>30°</td><td>Nose Down 1° (See Note 8)</td></tr><tr><td>Rudder</td><td>Right</td><td>25°</td><td>Left 22°</td></tr><tr><td>Rudder Tab</td><td>Right</td><td>25°</td><td>Left 25°</td></tr><tr><td>Flap Outboard</td><td></td><td></td><td>Down 40°</td></tr><tr><td>Flap Inboard</td><td></td><td></td><td>Down 40°</td></tr></table>	Spoiler	Up	60°		Aileron Trim	Up	20°	Down 20°	Elevator	Up	33°	Down 10°	Elevator Tab	Nose Up	30°	Nose Down 1° (See Note 8)	Rudder	Right	25°	Left 22°	Rudder Tab	Right	25°	Left 25°	Flap Outboard			Down 40°	Flap Inboard			Down 40°
Spoiler	Up	60°																															
Aileron Trim	Up	20°	Down 20°																														
Elevator	Up	33°	Down 10°																														
Elevator Tab	Nose Up	30°	Nose Down 1° (See Note 8)																														
Rudder	Right	25°	Left 22°																														
Rudder Tab	Right	25°	Left 25°																														
Flap Outboard			Down 40°																														
Flap Inboard			Down 40°																														
Serial Nos. Eligible	MU-2B-26 349 S.A.																																

Model MU-2B-36, 6 to 9 PCLM (Normal Category) Approved March 9, 1976

Engines 2 Honeywell (AiResearch / Garrett) TPE331-6-251M
Propeller-shaft to engine-rotor ratio 1: 20.865

Fuel Fuels as designated:
Aviation Turbine Fuel ASTM D1655-68T
Types Jet A, Jet A-1 and Jet B
MIL-T-5624G-1 Turbine Fuel: Grades JP-4 and JP-5
MIL-F-5616-1 Fuel; Grade JP-1
MIL-F-46005A (MR) -1; Type I and II
D. Eng. R.D. 2482; Issue No. 2
D. Eng. R.D. 2486; Issue No. 2
D. Eng. R.D. 2494; Issue No. 4
MIL-G-5572D; Grade 80/87 octane aviation
Gasoline (as emergency fuel only)
ASTM D910 aviation gasoline Grade 100LL (as emergency fuel only)

Oil Oils conforming to MIL-L-23699

Engine Limits Static Sea Level Rating (I.S.A.)

	Shaft Horsepower (SHP)	Propeller Shaft Speed (%)*	Maximum Permissible Interstage Turbine Temperature (°C)
Takeoff (5 min.)	715	100	923
Maximum continuous	715	100	923
Starting transient (1 sec.)			1149

At low altitude and low ambient temperature, the engines may produce more power than that for which the aircraft has been certificated. Under these conditions, the placarded torque meter limitations shall not be exceeded.

*The maximum allowable propeller shaft speed is 106% for a transient period not to exceed 5 seconds, and 101% continuous. 100% propeller shaft speed is defined as 2,000 rpm.

Propeller and Propeller Limits 2 Hartzell HC-B3TN-5(C or E or M)/T10178(N)B -11 with 3 blades each, or 2 Hartzell HC-B3TN-5(C or E or M)/T10178(N)B -11R with 3 blades each. See Note 7 and 10.

Diameter: 90-3/8 inches

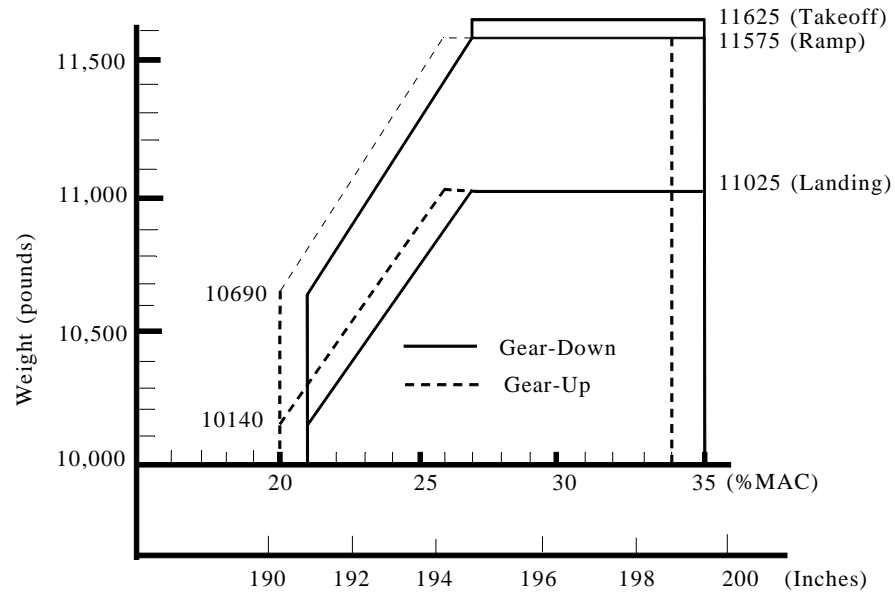
Pitch setting at 30 in. station

Flight idle	$12^{\circ} \pm 0.1^{\circ}$	Feathered	$87^{\circ} \pm 0.5^{\circ}$
Reverse	-6.5°		

Airspeed Limits (CAS) Vmo (maximum operating) : 250 knots (287 mph)
Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for Mmo = .57

Vp (Maneuvering)	: 191 knots (220 mph)
Vfe (Flaps extended)	
Flap 5°	: 175 knots (201 mph)
Flap 20°, 40°	: 155 knots (178 mph)
Vlo (Landing gear operating)	: 175 knots (201 mph)
Vle (Landing gear extended)	: 175 knots (196 mph)
Vmc (Minimum control)	: 99 knots (114 mph)

MU-2B-36 C.G. Range



Ramp & Takeoff C.G. Ranges	Forward		Aft		Weight Pounds
	In.	%MAC	In.	%MAC	
Gear Up	+190.3	20	+198.8	34	10690
Condition	+194.0	26	+198.8	34	11575
Gear	+190.9	21	+199.4	35	10690
Down	+194.6	27	+199.4	35	11575
Condition	+194.6	27	+199.4	35	11625

Landing C.G. Ranges	Forward		Aft		Weight Pounds
	In.	%MAC	In.	%MAC	
Gear Up	+190.3	20	+198.8	34	10140
Condition	+194.0	26	+198.8	34	11025
Gear Down	+190.9	21	+199.4	35	10140
Condition	+194.6	27	+199.4	35	11025

Straight line variation between points given.

Moment change due to gear retraction is -6556 in-lbs.

Maximum zero fuel weight - 9950 lbs.

Maximum weight Ramp: 11,625 lbs.
 Takeoff: 11,575 lbs.
 Landing: 11,025 lbs.

No. of seats Maximum 11 (pilot at + 97.2)
 See loading instructions for passenger loading.

Maximum baggage 600 lbs. at +286.8

Fuel capacity	<u>TOTAL CAP</u>	<u>USABLE</u>
Wing tank	159 gal. (+204.5)	154 gal.
Outer tank (2 at 15 gal. ea.)	30 gal. (+201.0)	30 gal.
Tip tank (2 at 93 gal. ea.)	186 gal. (+193.1)	180 gal.
Total	375 gal.	364 gal.

Fuel weights are based on 6.5 lbs./gal.

MU-2B-36 (cont'd)

Fuel Usage Procedure	The fuel quantity of each tip tank must not be more than 65 gallons before landing.			
Oil Capacity	Total	3.1 gal.	(1.55 gal. each tank)	(+175.9)
Maximum Operating Altitude	25,000 ft.			
Control Surface Movements	Spoiler	Up	60°	
	Aileron Trim	Up	20°	Down 20°
	Elevator	Up	28°	Down 12°
	Elevator Tab	Nose Up	30°	Nose Down 1° (See Note 8)
	Rudder	Right	24°	Left 22°
	Rudder Tab	Right	25°	Left 25°
	Flap Outboard			Down 40°
	Flap Inboard			Down 40°
Serial Nos. Eligible	MU-2B-36	None		

Model MU-2B-26A, 6 to 9 PCLM (Normal Category) approved January 12, 1977

Model MU-2B-40, 6 to 9 PCLM (Normal Category) approved March 2, 1978

Engines

Model MU-2B-26A	2 Honeywell (AiResearch / Garrett)	TPE331-5-252M
	Propeller-shaft to engine-rotor ratio	1 : 26.2287
Model MU-2B-40	2 Honeywell (AiResearch / Garrett)	TPE331-10-501M or
	2 Honeywell (AiResearch / Garrett)	TPE 331-10-511M
	Propeller-shaft to engine-rotor ratio	1 : 26.2287

Fuels

Fuels as designated

Aviation turbine fuel ASTM D1655-68T
Types Jet A, Jet A-1, and Jet B
MIL-T-5624G-1 turbine fuel; Grades JP-4 and JP-5
MIL-F-5616-1 Fuel; Grade JP-1
MIL-F-46005A (MR) -1; Types I and II
D. Eng. R.D. 2482; Issue No. 2
D. Eng. R.D. 2486; Issue No. 2
D. Eng. R.D. 2494; Issue No. 4
MIL-G-5572D; Grade 80/87 octane aviation
Gasoline (as emergency fuel only)
ASTM D910 aviation gasoline grade 100LL (as an emergency fuel only)

Oil

Oils conforming to MIL-L-23699

Engine Limits

	Static Sea Level Rating (I.S.A.)		Maximum Permissible Interstage Turbine Temperature (-26A) or Exhaust Gas Temperature (-40) (°C)	
	Shaft Horsepower (SHP)	Propeller Shaft Speed (%)*		
Takeoff (5 min.)	665	100	923	650
Maximum continuous	665	100	923	650
Starting transient (1 sec.)			1149	770
At low altitude and low ambient temperature, the engines may produce more power than that for which the aircraft has been certificated. Under these conditions, the placarded torque meter limitations shall not be exceeded.				

*The maximum allowable propeller shaft speed is 106% for a transient period not to exceed 5 seconds, and 101% continuous. 100% propeller shaft speed is defined as 1591 rpm.

Model MU-2B-26A, Model MU-2B-40 (cont'd)

Propeller and propeller limits 2 Hartzell HC-B4TN/5DL/LT10282NSB-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN/5DL/LT10282NSK-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5GL/LT10282NSB-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5GL/LT10282NSK-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5JL/LT10282NSB-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5JL/LT10282NSK-5.3R with 4 blades each.
 (See Note 9)

Diameter: 98 inches

Pitch setting at 30 in. station

Flight idle	$12^{\circ} \pm 0.1^{\circ}$
Feathered	$88^{\circ} \pm 0.7^{\circ}$
Reverse	-6.5°

Airspeed Limits (CAS)

V_{mo} (maximum operating) : 250 knots (287 mph)
 Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for M_{mo} = .57

V_p (Maneuvering) : 182 knots (209 mph)

V_{fe} (Flaps extended)

Flap 5° : 175 knots (201 mph)

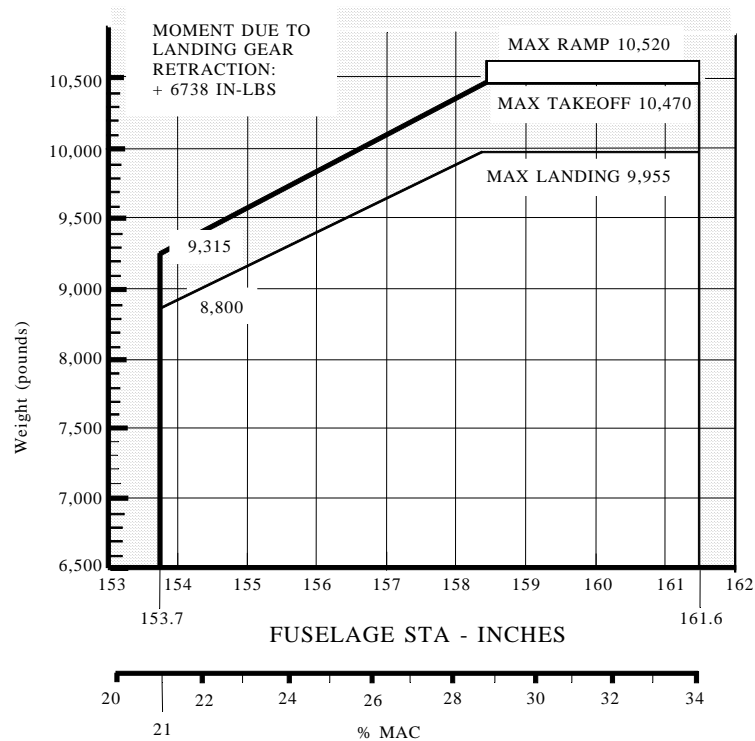
Flap 20°, 40° : 155 knots (178 mph)

V_{lo} (Landing gear operating) : 170 knots (196 mph)

V_{le} (Landing gear extended) : 170 knots (196 mph)

V_{mc} (Minimum control) : Flap 5°
 100 Knots (115 mph)
 Flaps 20°
 93 knots (107 mph)

C.G. Range (MU-2B-26A and MU-2B-40)



Ramp & Takeoff C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up	+154.3	22	+162.2	35	9315
Condition	+159.2	30	+162.2	35	10470
Gear	+153.7	21	+161.6	34	9315
Down	+158.6	29	+161.6	34	10470
Condition	+158.6	29	+161.6	34	10520

Landing C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up	+154.3	22	+162.2	35	8800
Condition	+159.2	30	+162.2	35	9955
Gear Down	+153.7	21	+161.6	34	8800
Condition	+158.6	29	+161.6	34	9955

Maximum zero fuel weight - 9700 lbs.

No. of seats	Maximum 9 (maximum operating altitude 25,000 ft.) (pilot at +97.2)
	Maximum 7 (maximum operating altitude 28,000 ft.) (pilot at +97.2) Model MU-2B-26A
	Maximum 7 (maximum operating altitude 31,000 ft.) (pilot at +97.2) Model MU-2B-40
	See loading instructions for passenger loading.

Maximum baggage 574 lbs. (200 lbs. at +205.) (220 lbs. at +230.7)
(154 lbs. at +253.2)

Fuel capacity	<u>TOTAL CAP</u>	<u>USABLE</u>
Wing tank	159 gal. (+167.3)	154 gal.
Outer tank (2 at 15 gal. ea.)	* 30 gal. (+163.4)	30 gal.
(2 at 35.3 gal. ea.)	**70.6 gal. (+163.4)	69 gal.
Tip tank (2 at 93 gal. ea.)	186 gal. (+155.9)	180 gal.
Total	*375 gal.	364 gal.
	**415.6 gal.	403.0 gal.

Fuel weights are based on 6.5 lbs./gal.

*MU-2B-26A, all S/N's, MU-2B-40, S/N 365 S.A.
 **MU-2B-40, S/N 395 S.A. thru 459 S.A.

Fuel usage procedure	The fuel quantity of each tip tank must not be more than 65 gallons (-26A) and 400 pounds (-40) before landing.
----------------------	---

Oil capacity	Total	3.1 gal. (1.55 gal. each tank) (+138.7)
--------------	-------	---

Maximum operating altitude	Model MU-2B-26A	28,000 ft.
	Model MU-2B-40	31,000 ft.

Model MU-2B-26A, Model MU-2B-40 (cont'd)

Control Surface Movements	Spoiler	Up	60°		
	Aileron Trim	Up	20°	Down	20°
	Elevator	Up	33°	Down	10°
	Elevator Tab	Nose Up	30°	Nose Down	1° (See Note 8)
	Rudder	Right	22°	Left	25°
	Rudder Tab	Right	25°	Left	25°
	Flap Outboard			Down	40°
	Flap Inboard			Down	40°
Serial Nos. eligible	MU-2B-26A	321 S.A.	348 S.A., 350 S.A. thru 364 S.A., 366 S.A. thru 394 S.A.		
	MU-2B-40	365 S.A.	395 S.A. thru 459 S.A.		

Model MU-2B-36A, 8 to 11 PCLM (Normal Category) Approved January 12, 1977

Model MU-2B-60, 8 to 11 PCLM (Normal Category) approved March 2, 1978

Engines

Model MU-2B-36A	2 Honeywell (AiResearch / Garrett)	TPE331-5-252M
	Propeller-shaft to engine-rotor ratio	1 : 26.2287
Model MU-2B-60	2 Honeywell (AiResearch / Garrett)	TPE331-10-501M or
	2 Honeywell (AiResearch / Garrett)	TPE 331-10-511M
	Propeller-shaft to engine-rotor ratio	1 : 26.2287

Fuel

Fuels as designated:

Aviation turbine fuel ASTM D1655-68T

Types Jet A, Jet A-1, and Jet B

MIL-T-5624G-1 turbine fuel: Grades JP-4 and JP-5

MIL-F-5616-1 Fuel; Grade JP-1

MIL-F-46005A (MR) -1; Types I and II

D. Eng. R.D. 2482; Issue No. 2

D. Eng. R.D. 2486; Issue No. 2

D. Eng. R.D. 2494; Issue No. 4

MIL-G-5572D; Grade 80/87 octane aviation

Gasoline (as emergency fuel only)

ASTM D910 aviation gasoline 100LL (as emergency fuel only)

Oil

Oils conforming to MIL-L-23699

Engine Limits

	Static Sea Level Rating (I.S.A.)		Maximum Permissible	
	Shaft Horsepower (SHP)	Propeller Shaft Speed (%)*	Interstage Turbine Temperature (-36A) or Exhaust Gas Temperature (-60) (°C)	
Takeoff (5 min.)	715	100	923	650
Maximum continuous	715	100	923	650
Starting transient (1 sec.)			1149	770

At low altitude and low ambient temperature, the engines may produce more power than that for which the aircraft has been certificated. Under these conditions, the placarded torque meter limitations shall not be exceeded.

*The maximum allowable propeller shaft speed is 106% for a transient period not to exceed 5 seconds, and 101% continuous. 100% propeller shaft speed is defined as 1,591 rpm.

Model MU-2B-36A, Model MU-2B-60 (cont'd)

Propeller and Propeller Limits 2 Hartzell HC-B4TN/5DL/LT10282NSB-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5DL/LT10282NSK-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5GL/LT10282NSB-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5GL/LT10282NSK-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5JL/LT10282NSB-5.3R with 4 blades each, or
 2 Hartzell HC-B4TN-5JL/LT10282NSK-5.3R with 4 blades each.
 (See Note 9)

Diameter: 98 inches

Pitch setting at 30 in. station

Flight Idle	$12^{\circ} \pm .1^{\circ}$
Feathered	$88.0 \pm .7^{\circ}$
Reverse	-6.5°

Airspeed Limits (CAS)

V_{mo} (Maximum Operating) : 250 knots (287 mph)
 Decrease by 5 knots per 1,000 ft. above 21,300 feet to account for M_{mo} - .57

V_p (Maneuvering) : 191 knots (220 mph)

V_{fe} (Flaps extended)

Flap 5° : 175 knots (201 mph)

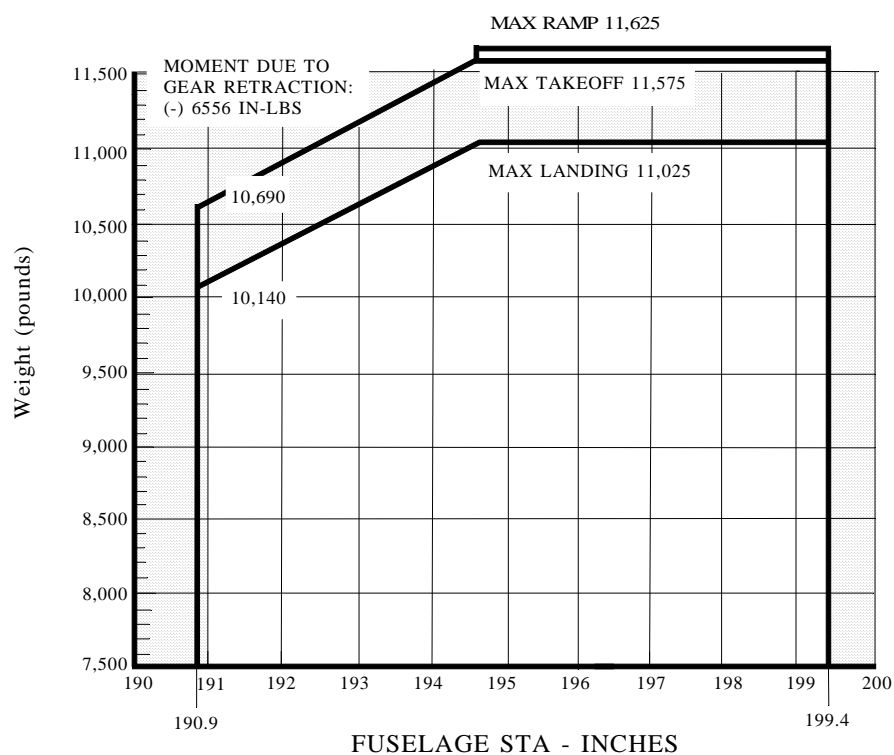
Flap 20°, 40° : 155 knots (178 mph)

V_{lo} (Landing gear operating) : 175 knots (201 mph)

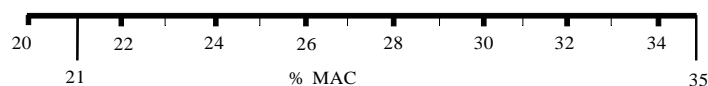
V_{le} (Landing gear extended) : 175 knots (201 mph)

V_{mc} (Minimum control) : 99 knots (114 mph)

(Flap deflection 5° and 20°)



Center of Gravity Envelope (MU-2B-36A and MU-2B-60)



Ramp & Takeoff C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up	+190.3	20	+198.8	34	10690
Condition	+194.0	26	+198.8	34	11575
Gear	+190.9	21	+199.4	35	10690
Down	+194.6	27	+199.4	35	11575
Condition	+194.6	27	+199.4	35	11625

Landing C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up	+190.3	20	+198.8	34	10140
Condition	+194.6	26	+198.8	34	11025
Gear Down	+190.9	21	+199.4	35	10140
Condition	+194.0	27	+199.4	35	11025

Maximum weight	Ramp: 11,625 lbs.
	Takeoff: 11,575 lbs.
	Landing: 11,025 lbs.
No. of seats	Maximum 11 (pilot at +97.2)
	See loading instructions for passenger loading.

Fuel capacity	<u>TOTAL CAP</u>	<u>USABLE</u>
Wing tank	159 gal. (+204.5)	154 gal.
Outer tank (2 at 15 gal. ea.)	* 30 gal. (+201.0)	30 gal.
(2 at 35.3 gal. ea.)	**70.6 gal. (+201.0)	69 gal.
Tip tank (2 at 93 gal. ea.)	186 gal. (+193.1)	180 gal.
Total	*375 gal.	364 gal.
	**415.6 gal.	403.0 gal.

*MU-2B-36A, all S/N's, MU-2B-60, S/N 700 S.A.
 **MU-2B-60, S/N 731 S.A. thru 799 S.A., 1501 S.A. thru 1569 S.A.

Oil capacity	Total	3.1 gal.	(1.55 gal. each tank)
			(+175.9)

Maximum operating altitude	Model MU-2B-36A	25,000 ft.
	Model MU-2B-60	31,000 ft.

Model MU-2B-36A, Model MU-2B-60 (cont'd)

Control Surface Movements	Spoiler	Up	60°		
	Aileron Trim	Up	20°	Down	20°
	Elevator	Up	28°	Down	12°
	Elevator Tab	Nose Up	30°	Nose Down	1° (See Note 8)
	Rudder	Right	22°	Left	24°
	Rudder Tab	Right	25°	Left	25°
	Flap Outboard			Down	40°
	Flap Inboard			Down	40°
Serial Nos. Eligible	MU-2B-36A	661 S.A. 697 S.A. thru 699 S.A., 701 S.A. thru 730 S.A.			
	MU-2B-60	700 S.A. 731 S.A. thru 799 S.A., 1501 S.A. thru 1569 S.A. (see Note 4).			

DATA PERTINENT TO ALL MODELS

Datum	Nose of fuselage for Models MU-2B-25, MU-2B-26, MU-2B-26A, and MU-2B-40 (Forward 183.46 in. (4660 mm) from front plane of wing rear spar fuselage connecting frame). 6.69 in. (170 mm) aft of nose for Models MU-2B-35, MU-2B-36, MU-2B-36A, and MU-2B-60 (Forward 220.67 in. (5605 mm) from front plane of wing rear spar fuselage).
MAC	60.55 in. (Leading edge of MAC is at +141.03 (MU-2B-25, MU-2B-26, MU-2B-26A, and MU-2B-40, and at +178.23 (MU-2B-35, MU-2B-36, MU-2B-36A, and MU-2B-60).
Leveling means	Position spirit level on the R.H. bracket of keel (STA. 5809, STA. 6020) longitudinally, and on the channel of door actuator laterally for Models MU-2B-25, MU-2B-26, MU-2B-26A, and MU-2B-40. A plumb bob suspension crimp fitted to the channel of the pressure bulkhead (STA. 8035), and a leveling provision scale on the equipment floor in the electrical compartment for Models MU-2B-35, MU-2B-36, MU-2B-36A, and MU-2B-60.
Certification basis	CAR 3 dated May 15, 1956, including Amendments 3-1 through 3-8 plus the Special Conditions stated in FAA letter to the JCAB dated May 14, 1965, modified by FAA letters to the JCAB dated January 25, 1968, and May 12, 1971. Exemption No. 1951, dated February 4, 1974, granted an exemption from Section 21.17. Type Certification No. A10SW issued January 20, 1976. Application for Type Certificate dated September 12, 1973.
Production basis	None (See Note 6)
Export eligibility	The Models MU-2B-26A, MU-2B-36A, MU-2B-40, and MU-2B-60 comply with French Certification requirements of the Secretariat General a l' Aviation Civile of France when modified in accordance with K940A-6006 kit installation.
Required equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for type certification. Mitsubishi Aircraft International Report MR0128 (MU-2B-25), MR0127 (MU-2B-35), MR0130 (MU-2B-26), MR0192 (MU-2B-26A), MR0269 (MU-2B-40), MR0129 (MU-2B-36), MR0193 (MU-2B-36A) and MR0270 (MU-2B-60) contain lists of all required equipment as well as optional equipment installations approved by the FAA.
Import requirements	None

- 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 aircraft at the time of original airworthiness certification.
- (b) The certificate empty weight and corresponding center of gravity location must include unusable fuel and undrainable oil as flows:
- Unusable Fuel (MU-2B-25, MU-2B-26, MU-2B-26A, MU-2B-40, S/N 365) 71.5 lbs. at +161.1; (MU-2B-40, S/N 395 and up) 81.90 lbs. at +161.4.
- Unusable Fuel (MU-2B-35, MU-2B-36, MU-2B-36A, MU-2B-60, S/N 700) 71.5 lbs. at + 198.3; (MU-2B-60, S/N 731 and up) 81.90 lbs. at +198.6.
- NOTE 2. This aircraft must be operated in accordance with the FAA approved Airplane Flight Manual.
- Serial numbers of aircraft. The serial number under this certificate must include the letters S.A. S.A. stands for San Angelo. Example: S/N xxxS.A.
- NOTE 3. Deleted. 12/09/05
.
- NOTE 4. MU-2B-60's S/N 1570, 1571, 1572, 1573, 1574, 1575, and 1576 are not eligible for any type of airworthiness certificate. Major structural deviations and intentional internal damage were accomplished on assemblies to render them unairworthy prior to donation to institutions and organizations for educational purposes only.
- NOTE 5. Mitsubishi Heavy Industries America Inc; Addison, Texas, is licensed by Mitsubishi Heavy Industries, Ltd. to maintain the type design and to manufacture replacement and modification parts for the Model MU-2B series airplanes listed in this type certificate data sheet.
- NOTE 6. Model MU-2B series airplanes with the serial number shown on Serial Nos. eligible column herein, were manufactured by Mitsubishi Aircraft International, Inc., MU-2B-40 with Serial Nos. 458S.A. an 459S.A. and MU-2B-60 with Serial Nos. 1563S.A. through 1569S.A. were manufactured under FAA Production Certificate No. 4SW.
- NOTE 7. Airworthiness Directive– AD 2003-04-23, mandated that the existing blades be replaced with new blades of the Latest design in accordance with Hartzell Propeller Inc. SB HC-SB-61-250, Revision 1, dated April 8, 2002. Effected models are MU-2B-25/-35/-26/-36. Removed Blade: T10178H-11R, T10178H(B)-11, T10178H(B)-11R Replaced By: T10178(N)B -11, T10178(N)B -11R
- NOTE 8. Airworthiness Directive– AD 93-07-11, mandated that the maximum deflection of the elevator nose-down tri reduce to 1 degree from 10 degrees in accordance with Mitsubishi Heavy Industries LTD. Service Bulletin No. 079/27-010 dated August 28, 1992. Effected models are MU-2B-25/-26/-26A/-40/-35/-36/-36A/-60
- NOTE 9. Updated the propeller blades per Hartzell SB HC-SB-61-170, Rev.B, dated September 18, 1992, and A188, dated February 25, 1994, AD 95-01-02.
- NOTE 10. Updated the propeller hubs and blades per Hartzell TC Data Sheet P15EA, Note 6(a) and (c).

.....END.....