

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A2PC

Revision 20
MITSUBISHI
MU-2B
MU-2B-10
MU-2B-20
MU-2B-15
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March 8, 2016

TYPE CERTIFICATE DATA SHEET NO. A2PC

This data sheet which is part of Type Certificate No. A2PC prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

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

I - Model MU-2B, 6 to 9 PCLM (Normal Category), Approved November 4, 1965.

Engines	2 Honeywell (AiResearch/Garrett) Propeller-shaft to engine-rotor ratio	TPE331-25AA or TPE331-25AB 1 : 20.865
Fuel	Fuels as designated ASTM D1655-68T Aviation Turbine Fuels MIL-T-5624G-1 Turbine Fuel MIL-F-5616-1 Fuel MIL-F-46005A (M) -I Fuel British Ministry of Supply Specifications MIL-G-5572D Aviation Gasoline	Type Jet A, JET A-1 and Jet B Grade JP-4 and JP-5 Grade JP-1 Type I and II (a) D.Eng.R.D.2482 Issue No.2 (b) D.Eng.R.D.2486 Issue No.2 (c) D.Eng.R.D.2494 Issue No.4 Grade 80/87 (as emergency fuel only) Grade 100/130 (as emergency fuel only)

Oil Oils brands and trade names conforming to MIL-L-23699 or MIL-L-7808 are approved lubricants. (See Allied Signal Aerospace Company Service Information Letter SIL P331-2 latest revision.)

Engine Limits

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

	Shaft Horse- power (SHP)	Jet Thrust (lbs.)	Equivalent Shaft Horse- Power (ESHP)	*Propeller Shaft Speed (%)*	Maximum Permissible Exhaust Gas Temperature (°C)
Takeoff (5 min.)	575	75	605	100	571
Maximum continuous	500	73	529	100	530
Starting transient (1 sec.)					815

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 105% for a transient period not to exceed 5 seconds. 100% propeller shaft speed is defined as 2,000 r.p.m.

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Rev 20 changes: revised note 9

MU-2B (cont'd)

Propeller and Propeller Limits	2	Hartzell HC-B3TN-5(C or E or M)/T10176SB-5 with 3 blades each, or
	2	Hartzell HC-B3TN-5(C or E or M)/T10176NSB-5 with 3 blades each, or
	2	Hartzell HC-B3TN-5(C or E or M)/T10178B-11 with 3 blades each, or
	2	Hartzell HC-B3TN-5(C or E or M)/T10178NB-11 with 3 blades each, or
	2	Hartzell HC-B3TN-5(C or E or M)/T10178B-11R with 3 blades each, or
	2	Hartzell HC-B3TN-5(C or E or M)/T10178NB-11R with 3 blades each
	See Note 6 and 8	
	Diameter	96-3/8 inches (T10176-5) 90-3/8 inches (T10178-11)
	Pitch setting at 30 in. Station	
	Flight Idle	12°
	Feathered	86.5°± 0.5° (T10176-5) 87.0 °± 0.5°(T10178-11)
Airspeed Limits (CAS)	Vmo (Maximum Operating)	250 knots (287 m.p.h.) Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for Mmo = .57M
	Vp (Maneuvering)	172 knots (197 m.p.h.)
	Vfe (Flaps extended)	140 knots (161 m.p.h.)
	Vlo (Landing gear operating)	160 knots (184 m.p.h.)
	Vle (Landing gear extended)	160 knots (184 m.p.h.)
	Vmc (Minimum control)	91 knots (105 m.p.h.) (S/N 008,010,013 if not modified by S/B No. 66) 89 knots (102 m.p.h.) (S/N 1009,011,012,014 thru 038 if not modified by S/B No.66)
	Flap 5°	99 knots (114 m.p.h.) (S/N 008, 010, 013 if modified by S/B No.66)
	Flap 20°	91 knots (105 m.p.h.) (S/N 008, 010, 013 if modified by S/B No.66)
	Flap 5°	97 knots (112 m.p.h.) (S/N 009, 011, 012, 014 thru 038 if modified by S/B No.66)
	Flap 20°	89 knots (102 m.p.h.) (S/N 009, 011, 012, 014 thru 038 if modified by S/B No. 66)
C. G. Range	(Landing Gear Extended)	
	Weight (lbs.)	Forward Aft
	8,160 or less	+153.74 (21% MAC) +161.60 (34% MAC)
	8, 930	+158.58 (29% MAC) +161.60 (34% MAC)
	(If not modified by S/B No.36 and 92.)	
	8, 577 or less	+153.74 (21% MAC) +161.60 (34% MAC)
	9,350	+158.58 (29% MAC) +161.60 (34% MAC)
	(If modified by S/B No.36 and 92.)	
	Straight line variation between points given.	
	Moment change due to gear retraction is +6, 738 in. lbs.	

MU-2B (cont'd)

Maximum Weight	Takeoff	8,930 lbs.	
	Landing	8,490 lbs.	
	Zero fuel	8,490 lbs.	
		(If not modified by S/B No.36 and 92.)	
	Takeoff	9,350 lbs.	
	Landing	8,930 lbs.	
No. of Seats	Zero fuel	8,930 lbs.	
		(If modified by S/B No.36 and 92.)	
	Maximum 9 (Pilot at +97.2)		
Maximum Baggage	420 lbs. (200 lbs. at +205.1) (220 lbs. at +230.7)		
	(S/N 008 thru 024 if not modified by S/B No.10)		
	574 lbs. (200 lbs. at +205.1) (220 lbs. at +230.7) (154 lbs. at +253.2)		
	(S/N 008 thru 024 if modified by S/B No. 10, and S/N 025 and up)		
Fuel Capacity		<u>Total Cap</u>	<u>Usable</u>
	Wing Tank	165 gal. (+167.3)	155 gal.
	TIP Tank (2 at 65 gal. ea.)	130 gal. (+155.9)	130 gal.
	Total	295 gal.	285 gal.
	Fuel weights are based on 6.5 lbs./gal.		
	*See Note 1 (c) for required fuel usage procedure.		
Oil Capacity	Total 3.1 gal. (1.55 gal. each tank) (+139.4)		
Maximum Operating Altitude	23,000 ft. (if not modified by S/B No.69)		
	25,000 ft. (if modified by S/B No.69)		
Control Surface Movements	Spoiler	Up 60°	
	Aileron Trim	Up 20°	Down 20°
	Elevator	Up 33°	Down 17° (If not modified by S/B No.60/
		Up 33°	Down 10° (If modified by S/B No. 60)
	Elevator Tab	Up 30°	Down 20° (f not modified by S/B No.216)
		Up 30°	Down 1° (if modified by S/B No.216)
	Rudder	Right 25°	Left 25°
	Rudder Tab	Right 25°	Left 25°
	Flap Outboard		Down 40°
	Flap Inboard		Down 40°
Serial Nos. eligible	The Government of Japan Certificate of Airworthiness for Export endorsed as noted under		
	“Import Requirements” must be submitted for each individual aircraft for which application for certification is made.		

II-Model MU-2B-10, 6 to 9 PCLM (Normal Category), Approved January 20, 1967

Engines	(See Note4 for conversion to MU-2B-15.) 2 Honeywell (AiResearch/Garrett) Propeller-shaft to engine-rotor ratio	PE331-25AA or TPE331-25AB 1 : 20.865																																	
Fuel	Fuels as designated ASTM D1655-68T Aviation Turbine Fuels MIL-T-5624G-1 Turbine Fuel MIL-F-5616-1 Fuel MIL-F-46005A (MR) -I Fuel British Ministry of Supply Specifications MIL-G-5572D Aviation Gasoline	Type Jet A, JET A-1 and Jet B Grade JP-4 and JP-5 Grade JP-1 Type I and II (a) D.Eng.R.D.2482 Issue No.2 (b) D.Eng.R.D.2486 Issue No.2 (c) D.Eng.R.D.2494 Issue No.4 Grade 80/87 (as emergency fuel only) Grade 100/130 (as emergency fuel only)																																	
Oil	Oils brands and trade names conforming to MIL-L-23699 or MIL-L-7808 are approved lubricants. (See Allied Signal Aerospace Company Service Information Letter SIL P331-2 latest revision.)																																		
Engine Limits	<table><thead><tr><th colspan="6">Static Sea Level Rating (I.S.A.)</th></tr><tr><th></th><th>Shaft Horse- power (SHP)</th><th>Jet Thrust (lbs.)</th><th>Equivalent Shaft Horse- Power (ESHP)</th><th>*Propelle r Shaft Speed (%)*</th><th>Maximum Permissible Exhaust Gas Temperature (°C)</th></tr></thead><tbody><tr><td>Takeoff (5 min.)</td><td>575</td><td>75</td><td>605</td><td>100</td><td>571</td></tr><tr><td>Maximum continuous</td><td>500</td><td>73</td><td>529</td><td>100</td><td>530</td></tr><tr><td>Starting transient (1 sec.)</td><td></td><td></td><td></td><td></td><td>815</td></tr></tbody></table> <p>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.</p> <p>*The maximum allowable propeller shaft speed is 105% for a transient period not to exceed 5 seconds. 100% propeller shaft speed is defined as 2,000 r.p.m.</p>					Static Sea Level Rating (I.S.A.)							Shaft Horse- power (SHP)	Jet Thrust (lbs.)	Equivalent Shaft Horse- Power (ESHP)	*Propelle r Shaft Speed (%)*	Maximum Permissible Exhaust Gas Temperature (°C)	Takeoff (5 min.)	575	75	605	100	571	Maximum continuous	500	73	529	100	530	Starting transient (1 sec.)					815
Static Sea Level Rating (I.S.A.)																																			
	Shaft Horse- power (SHP)	Jet Thrust (lbs.)	Equivalent Shaft Horse- Power (ESHP)	*Propelle r Shaft Speed (%)*	Maximum Permissible Exhaust Gas Temperature (°C)																														
Takeoff (5 min.)	575	75	605	100	571																														
Maximum continuous	500	73	529	100	530																														
Starting transient (1 sec.)					815																														
Propeller and Propeller Limits	2 Hartzell 2 Hartzell 2 Hartzell 2 Hartzell 2 Hartzell 2 Hartzell See Note 6 and 8	HC-B3TN-5(C or E or M)/T10176SB-5 with 3 blades each, or HC-B3TN-5(C or E or M)/T10176NSB-5 with 3 blades each, or HC-B3TN-5(C or E or M)/T10178B-11 with 3 blades each, or HC-B3TN-5(C or E or M)/T10178NB-11 with 3 blades each, or HC-B3TN-5(C or E or M)/T10178B-11R with 3 blades each, or HC-B3TN-5(C or E or M)/T10178NB-11R with 3 blades each																																	
	Diameter	96 – 3/8 inches (T10176-5) 90 – 3/8 inches (T10178-11)																																	
	Pitch setting at 30 in. Station																																		
	Flight Idle	12°																																	
	Feathered	86.5° ± 0.5° (T10176-5) 87.0° ± 0.5° (T10178-11)																																	
Airspeed Limits (CAS)	Vmo (Maximum Operating) Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for Mmo = .57 M Vp (Maneuvering) Vfe(Flaps extended) Vlo (Landing gear operating) Vle (Landing gear extended) Vmc(Minimum control) Flap 5° Flap 20°	250 knots (287 m.p.h.) 172 knots (197 m.p.h.) 140 knots (161 m.p.h.) 160 knots (184 m.p.h.) 160 knots (184 m.p.h.) 89 knots (102 m.p.h.) (S/N 101 thru 113 if not modified by S/B No.66) 97 knots (112 m.p.h.) (S/N 101 thru 113 if modified by S/B No.66, and S/N 116, 117, 119, 120) 89 knots (102 m.p.h.) (S/N 101 thru 113 if modified by S/B No.66, and S/N 116, 117, 119, 120)																																	

MU-2B-10 (cont'd)

C. G. Range

(Landing Gear Extended)

Weight (lbs.)	Forward	Aft
8,577 or less	+153.74 (21% MAC)	+161.60 (34% MAC)
9,350	+158.58 (29% MAC)	+161.60 (34% MAC)

Straight line variation between points given.

Moment change due to gear retraction is +6,738 in. lbs.

Maximum Weight

Takeoff	9,350 lbs.
Landing	8,930 lbs.
Zero fuel	8,930 lbs.

No. of Seats

Maximum 9 (Pilot at +97.2)

Maximum Baggage

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

Fuel Capacity

Tip Tanks	Standard		Extend range		F. STA
	Total Gap	Usable	Total Gap	Usable	
Wing Tank	159 gal.	156 gal.	159 gal.	156 gal.	+167.3
Tip Tanks	130 gal.	130 gal.	186* gal.	180 gal.	+155.9
Total	289 gal.	286 gal.	345 gal.	336 gal.	

Fuel weights are based on 6.5 lbs./gal.

*See Note 1 (c) for required fuel usage procedure.

Oil Capacity

Total 3.1 gal. (1.55 gal. each tank) (+139.4)

Maximum Operating Altitude

23,000 ft.(if not modified by S/B No. 69)

25,000 ft.(if modified by S/B No. 69)

Control Surface Movements

Spoiler	Up	60°		
Aileron Trim	Up	20°	Down	20°
Elevator	Up	33°	Down	17° (S/N 101 thru 108 if not modified by S/B No. 60)
	Up	33°	Down	10° (S/N 101 thru 108 if modified by S/B No. 60, and S/N 109 and up)
Elevator Tab	Up	30°	Down	20° (if not modified by S/B No. 216)
	Up	30°	Down	1° (if modified by S/B No. 216)
Rudder	Right	25°	Left	25°
Rudder Tab	Right	25°	Left	25°
Flap Outboard			Down	40°
Flap Inboard			Down	40°

Serial Nos. eligible

The Government of Japan Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for certification is made

III-Model MU-2B-20, 6 to 9 PCLM (Normal Category). Approved May 16, 1968.

Engines	2 Honeywell (AiResearch/Garrett) Propeller-shaft to engine-rotor ratio	TPE331-1-151A 1 : 20.865
Fuel	Fuels as designated ASTM D1655-68T Aviation Turbine Fuels MIL-T-5624G-1 Turbine Fuel MIL-F-5616-1 Fuel MIL-F-46005A (MR) -1 Fuel	Type Jet A, JET A-1 and Jet B Grade JP-4 and JP-5 Grade JP-1 Type I and II

III-Model MU-2B-20, (Cont.)

Fuel (cont.)	British Ministry of Supply Specifications	(a) D.Eng.R.D.2482 Issue No.2 (b) D.Eng.R.D.2486 Issue No.2 (c) D.Eng.R.D.2494 Issue No.4 MIL-G-5572D Aviation Gasoline Grade 80/87 (as emergency fuel only) Grade 100/130 (as emergency fuel only)
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Oil	Oil brands and trade names conforming to MIL-L-23699 or MIL-L-7808 are approved lubricants. (See Allied Signal Aerospace Company Service Information Letter SIL P331-2 latest revision.)
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Engine Limits	Static Sea Level Rating (I. S. A.)				
	Shaft Horse-power (SHP)	Jet Thrust (lbs.)	Equivalent Shaft Horse-Power (ESHP)	Propeller Shaft Speed (%)*	Maximum Permissible Interstage Turbine Temperature (°C)
Takeoff (5 min.)	665	100	705	100	572
Maximum continuous	665	100	705	100	550
Starting transient (1 sec.)					815

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 105% for a transient period not to exceed 5 seconds, and 101% for 5 minutes. 100% propeller shaft speed is defined as 2,000 r.p.m.

Propeller and Propeller Limits	2 Hartzell HC-B3TN-5(C or E or M)/T10178B-11 with 3 blades each, or 2 Hartzell HC-B3TN-5(C or E or M)/T10178NB-11 with 3 blades each, or 2 Hartzell HC-B3TN-5(C or E or M)/T10178B-11R with 3 blades each, or 2 Hartzell HC-B3TN-5(C or E or M)/T10178NB-11R with 3 blades each See Note 6 and 8 Diameter	90-3/8 inches
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Pitch setting at 30 in. station

Flight Idle	12°
Feathered	87.0°± 0.5°
Reverse	-6.5°

Airspeed Limits (CAS)	Vmo (Maximum Operating) 250 knots (287 m.p.h.) Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for Mmo = .57M Vp (Maneuvering) 181 knots (208 m.p.h.) Vfe (Flaps extended) Flap 5° 140 knots (161 m.p.h.) (if not modified by S/R No.010) Flap 5° 175 knots (201 m.p.h.) Flap 20°, 40° 140 knots (161 m.p.h.) Vlo (Landing gear operating) 160 knots (184 m.p.h.) Vle (Landing gear extended) 162 knots (187 m.p.h.) Vmc (Minimum control) Flap 5° 100 knots (115 m.p.h.) Flap 20° 93 knots (107 m.p.h.)
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C. G. Range
(Landing Gear Extended)

<u>Weight (lbs.)</u>	<u>Forward</u>	<u>Aft</u>
9,149 or less	+153.74 (21% MAC)	+ 161.60 (34% MAC)
9,920	+ 158.58 (29% MAC)	+ 161.60 (34% MAC)

Straight line variation between points given.

Moment change due to gear retraction is +6, 738 in. lbs.

MU-2B-20 (Cont'd)

Maximum Weight	Takeoff	9,920 lbs.	
	Landing	9,435 lbs.	
	Zero fuel	9,270 lbs.	
No. of Seats	Maximum 9 (Pilot at +97.2)		
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)	156 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.	366 gal.
	Without Outer Tank		
	Wing Tank	159 gal. (+167.3)	156 gal.
	Tip Tank (2 at 93 gal. ea.)*	186 gal. (+155.9)	180 gal.
	Total	345 gal.	336 gal.
		Fuel weights are based on 6.5 lbs./gal.	
	*See Note 1 (c) for required fuel usage procedure.		
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	Up 30°	Down 20° (S/N102, 121 thru 164, if not modified by S/B No. 216)
		Up 30°	Down 10° (S/N 165 and up, if not modified by S/B No. 216)
		Up 30°	Down 1° (S/N102, 121, and up if modified by S/B No. 216)
	Rudder	Right 25°	Left 22°
	Rudder tab	Right 25°	Left 25°
	Flap outboard		Down 40°
	Flap inboard		Down 40°
Serial Nos. eligible	The Government of Japan Certificate of Airworthiness for Export endorsed as noted under “Import Requirements” must be submitted for each individual aircraft for which application for certification is made.		

IV-Model MU-2B-15, 6 to 9 PCLM (Normal Category), Approved August 15, 1968.

Engines	2 Honeywell (AiResearch/Garrett) TPE331-1-151A Propeller-shaft to engine-rotor ratio 1: 20.865		
Fuel	Fuels as designated ASTM D1655-68T Aviation Turbine Fuels Type Jet A, JET A-1 and Jet B MIL-T-5624G-1 Turbine Fuel Grade JP-4 and JP-5 MIL-F-5616-1 Fuel Grade JP-1 MIL-F-46005A (MR) -I Fuel Type I and II British Ministry of Supply Specifications (a) D.Eng.R.D.2482 Issue No.2 (b) D.Eng.R.D.2486 Issue No.2 (c) D.Eng.R.D.2494 Issue No.4 MIL-G-5572D Aviation Gasoline Grade 80/87 (as emergency fuel only) Grade 100/130 (as emergency fuel only)		
Oil	Oil brands and trade names conforming to MIL-L-23699 or MIL-L-7808 are approved lubricants. (See Allied Signal Aerospace Company Service Information Letter SIL P331-2 latest revision.)		

IV-Model MU-2B-15, Cont.

Engine Limits

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

	Shaft Horse- power (SHP)	Jet Thrust (lbs.)	Equivalent Shaft Horse- Power (ESHP)	*Propeller Shaft Speed (%)*	Maximum Permissible Exhaust Gas Temperature (°C)
Takeoff (5 min.)	665	100	705	100	572
Maximum continuous	665	100	705	100	550
Starting transient (1 sec.)					815

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 105% for a transient period not to exceed 5 seconds, and 101 % for 5 minutes. 100% propeller shaft speed is defined as 2,000 r.p.m.

Propeller and
Propeller Limits

- 2 Hartzell HC-B3TN-5(C or E or M)/T10178B-11 with 3 blades each, or
 - 2 Hartzell HC-B3TN-5(C or E or M)/T10178NB-11 with 3 blades each, or
 - 2 Hartzell HC-B3TN-5(C or E or M)/T10178B-11R with 3 blades each, or
 - 2 Hartzell HC-B3TN-5(C or E or M)/T10178NB-11R with 3 blades each
- See Note 6 and 8.

Diameter 90-3/8 inches

Pitch setting at 30 in. station

Flight idle 12°

Feathered 87.0°±0.5

Reverse -6.5°

Airspeed Limits
(CAS)

Vmo (Maximum operating)	250 knots (287 m.p.h.)
Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for Mmo = .57M	
Vp(Maneuvering)	172 knots (197 m.p.h.)
Vfe (Flap extended)	140 knots (161 m.p.h.)
Vlo (Landing gear operating)	160 knots (184 m.p.h.)
Vle (Landing gear extended)	160 knots (184 m.p.h.)
Vmc (Minimum Control)	93 knots (107 m.p.h.)
Flap 5°	(S/N 114 and 115 if not modified by SB No.66 100 knots (115 m.p.h.) (S/N 114 and 115 if modified by S/B No.66 and S/N 118)
Flap 20°	93 knots (107 m.p.h.) (S/N 114 and 115 if modified by S/B No.66 and S/N 118)

C. G. Range
(Landing Gear Extended)

<u>Weight (lbs.)</u>	<u>Forward</u>	<u>Aft</u>
8,577 or less	+ 153.74 (21% MAC)	+ 161.60 (34% MAC)
9,350	+ 158.58 (29% MAC)	+161.60 (34% MAC)

Straight line variation between points given.

Moment change due to gear retraction is +6, 738 in. lbs.

Maximum
weight

Take off	9,350 lbs.
Landing	8,930 lbs.
Zero fuel	8,930 lbs.

No. of Seat

Maximum 9 (Pilot at +97.2)

MU-2B-15 (cont'd)

Maximum Baggage	574 lbs. (200lbs. at +205.1) (220lbs. at +230.7) (154lbs. at +253.2)			
Fuel Capacity		<u>Total Cap</u>		<u>Usable</u>
	Wing Tank	159 gal. (+167.3)		156 gal.
	Tip Tank (2 at 93 gal. ea.)*	186 gal. (+155.9)		180 gal.
	Total	345gal.		336 gal.
	Fuel weights are based on 6.5 lbs./gal.			
	*See Note 1 (c) for required fuel usage procedure.			
Oil Capacity	Total 3.1 gal. (1.55 gal. each tank) (+138.7)			
Maximum Operating Altitude	23,000 ft. (If not modified by S/B No.69) 25,000 ft. (If modified by S/B No.69)			
Control Surface Movements	Spoiler	Up	60°	
	Aileron Trim	Up	20°	Down 20°
	Elevator	Up	33°	Down 10°
	Elevator tab	Up	30°	Down 20° (If not modified by S/B No. 216)
		Up	30°	Down 1° (If modified by S/B No. 216)
	Rudder	Right	25°	Left 22°
	Rudder tab	Right	25°	Left 25°
	Flap outboard			Down 40°
	Flap inboard			Down 40°
	Serial Nos. eligible	The Government of Japan Certificate of Airworthiness for Export endorsed as noted under “Import Requirements” must be submitted for each individual aircraft for which application for certification.		

I-Model MU-2B-30, 10 PCLM (Normal Category), Approved July 14, 1969

Engines	2 Honeywell (AiResearch/Garrett)	TPE331-1-151A
	Propeller-shaft to engine-rotor ratio	1: 20.865
Fuel	Fuels as designated	
	ASTM D1655-68T Aviation Turbine Fuels	Type Jet A, JET A-1 and Jet B
	MIL-T-5624G-1 Turbine Fuel	Grade JP-4 and JP-5
	MIL-F-5616-1 Fuel	Grade JP-1
	MIL-F-46005A (MR) -I Fuel	Type I and II
	British Ministry of Supply Specifications	(a) D.Eng.R.D.2482 Issue No.2 (b) D.Eng.R.D.2486 Issue No.2 (c) D.Eng.R.D.2494 Issue No.4
	MIL-G-5572D Aviation Gasoline	Grade 80/87 (as emergency fuel only) Grade 100/130 (as emergency fuel only)
Oil	Oil brands and trade names conforming to MIL-L-23699 or MIL-L-7808 are approved lubricants. (See Allied Signal Aerospace Company Service Information Letter SIL P331-2 latest revision.)	

I-Model MU-2B-30, Cont.

Engine Limits

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

	Shaft Horsepower (SHP)	Jet Thru st (lbs.)	Equivalent Horse- Power (ESHP)	*Propeller Shaft Speed (%)*	Maximum Permissible Interstage Turbine Temperature (°C)
Takeoff (5 min.)	665	100	705	100	572
Maximum Continuous	665	100	705	100	550
Starting transient (1 sec.)					815

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 105% for a transient period not to exceed 5 seconds, and 101% for 5 minutes. 100% propeller shaft speed is defined as 2,000 r.p.m.

Propeller and Propeller
Limits

2 Hartzell	HC-B3TN-5(C or E or M)/T10178B-11 with 3 blades each, or
2 Hartzell	HC-B3TN-5(C or E or M)/T10178NB-11 with 3 blades each, or
2 Hartzell	HC-B3TN-5(C or E or M)/T10178B-11R with 3 blades each, or
2 Hartzell	HC-B3TN-5(C or E or M)/T10178NB-11R with 3 blades each
See Note 6 and 8.	
Diameter	90-3/8 inches
Pitch setting at 30 in. station	
Flight Idle	12°
Feathered	87.0 ° ± 0.5°
Reverse	-6.5°

Airspeed Limits (CAS)

V _{mo} (Maximum Operating)	250 knots (287 m.p.h.)
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 m.p.h.)
V _{fe} (Flaps extended)	
Flap 5°	145 knots (167 m.p.h.) (S/N 502, 504, 506 thru 519, 521 thru 523 if not modified by S/B No.113)
Flap 5°	146 knots (168 m.p.h.) (S/N 505, 520, 524 and up if not modified by S/R No. 010) (S/N 502 thru 504, 506 thru 519, 521 thru 523 if modified by S/B No. 113 and not modified by S/R No.010)
Flap 5°	175 knots (201 m.p.h.)
Flap 20°, 40°	146 knots (168 m.p.h.) (S/N 505, 520, 524 and up if modified by S/R No. 010) (S/N 502 thru 504, 506 thru 519, 521 thru 523 if modified by S/B No. 113 and S/R No.010)

MU-2B-30 (cont'd)

Airspeed Limits (CAS) Cont.

V _{lo} (Landing gear operating)	Retract	160 knots (184 m.p.h.) (S/N 502 thru 504, 506 thru 519, 521 thru 523 if not modified by S/B No.113)
	Extend	170 knots (195 m.p.h.) (S/N 502 thru 504, 506 thru 519, 521 thru 523 if not modified by S/B No.113)
	Retract	170 knots (195 m.p.h.) (S/N 505, 520, 524 and up. S/N 502 thru 504, 506 thru 519, 521 thru 523 if modified by S/B No.113)
	Extend	170 knots (195 m.p.h.) (S/N 505, 520, 524 and up. S/N 502 thru 504, 506 thru 519, 521 thru 523 if modified by S/B No.113)
V _{le} (Landing gear extended)		170 knots (195 m.p.h.)
V _{mc} (Minimum control)		
Flap 5°		99 knots (114 m.p.h.)
Flap 20°		90 knots (104 m.p.h.)

C. G. Range
(Landing Gear Extend)

Weight (lbs.)	Forward	Aft
10,360	+190.93 (21% MAC)	+199.41(35% MAC)
(S/N 502 thru 504, 506 thru 519, 521 thru 523 if not modified by S/B No. 113)		
10,360 or less	+190.93 (21% MAC) to	+199.41(35% MAC)
10,800	+192.75 (24% MAC) to	+199.41(35% MAC)
(S/N 505, 520, 524, and up. S/N 502 thru 504, 506 thru 519, 521 thru 523 if modified by S/B No.113)		
Straight line variation between points given.		
Moment change due to gear retraction is -6,556 in. lbs.		

Maximum Weight

Take off	10,360 lbs.
Landing	9,850 lbs.
Zero fuel	9,772 lbs.
(S/N 502 thru 504, 506 thru 519, 521 thru 523 if not modified by S/B No.113)	
Take off	10,800 lbs.
Landing	10,260 lbs.
Zero fuel	9,772 lbs.
(S/N 505, 520, 524 and up. S/N 502 thru 504, 506 thru 519, 521 thru 523 if modified by S/B No.113)	

No. of Seats

Maximum 10 (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)	156 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.	366 gal.

Fuel weight is based on 6.5 lbs./gal.

*See Note 1 (c) for required fuel usage procedure.

MU-2B-30 (cont'd)

Oil Capacity	Total (2 at 1.55 gal. each tank) 3.1 gal. (+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	Up	30°	Down 10°
				(If not modified by S/B No. 216)
		Up	30°	Down 1°
				(If modified by S/B No. 216)
	Rudder	Right	24°	Left 22°
	Rudder Tab	Right	25°	Left 25°
	Flap Outboard			Down 40°
	Flap Inboard			Down 40°
Serial Nos. eligible	The Government of Japan Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for certification is made.			

II-Model MU-2B-35, 8 to 10 PCLM (Normal Category), Approved May 28, 1971.

Engines	2 Honeywell (AiResearch/Garrett)	TPE331-6-251M, or
	2 Honeywell (AiResearch/Garrett)	TPE331-6A-251M, or
	2 Honeywell (AiResearch/Garrett)	TPE331-6-252M, or
	2 Honeywell (AiResearch/Garrett)	TPE331-6A-252M
	Propeller-shaft to engine-rotor ratio	1: 20.865
Fuel	Fuels as designated	
	ASTM D1655-68T Aviation Turbine Fuels	Type Jet A, JET A-1 and Jet B
	MIL-T-5624G-1 Turbine Fuel	Grade JP-4 and JP-5
	MIL-F-5616-1 Fuel	Grade JP-1
	MIL-F-46005A (MR) -1 Fuel	Type I and II
	British Ministry of Supply Specifications	(a) D.Eng.R.D.2482 Issue No.2
		(b) D.Eng.R.D.2486 Issue No.2
		(c) D.Eng.R.D.2494 Issue No.4
	MIL-G-5572D Aviation Gasoline	Grade 80/87
		(as emergency fuel only)
		Grade 100/130
		(as emergency fuel only)
Oil	Oil brands and trade names conforming to MIL-L-23699 or MIL-L-7808 are approved lubricants. (See Allied Signal Aerospace Company Service Information Letter SIL P331-2 latest revision.)	
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 is 106% for a transient period not to exceed 5 seconds, and 101.5% for 5 minutes. 100% propeller shaft speed is defined as 2,000 r.p.m.

MU-2B-35 (cont'd)

Propeller and Propeller Limits

- 2 Hartzell HC-B3TN-5(C or E or M)/T10178B-11 with 3 blades each, or
 2 Hartzell HC-B3TN-5(C or E or M)/T10178B-11R with 3 blades each, or
 2 Hartzell HC-B3TN-5(C or E or M)/T10178NB-11 with 3 blades each, or
 2 Hartzell HC-B3TN-5(C or E or M)/T10178NB-11R with 3 blades each

See Note 6 and 8.

Diameter 90-3/8 inches

Pitch setting at 30 in. station

Flight Idle 12°

Feathered 87.0 ° ± 0.5°

Reverse -6.5°

Airspeed Limits (CAS)

Vmo (Maximum Operating) 250 knots (287 m.p.h.)

Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for Mmo = .57 M

Vp (Maneuvering) 188 knots (216 m.p.h.)

Vfe (Flaps extended)

Flap 5°

146 knots (168 m.p.h.) (S/N 548 thru 609 if not modified by S/R No.010)

Flap 5°

175 knots (201 m.p.h.) (S/N 610 and up, S/N 548 thru 609 if modified by S/R No.010)

Flap 20°, 40°

146 knots (168 m.p.h.)

Vlo (Landing gear operating)

Retract

170 knots (195 m.p.h.)

Extend

170 knots (195 m.p.h.)

Vle (Landing gear extended)

170 knots (195 m.p.h.)

Vmc (Minimum control)

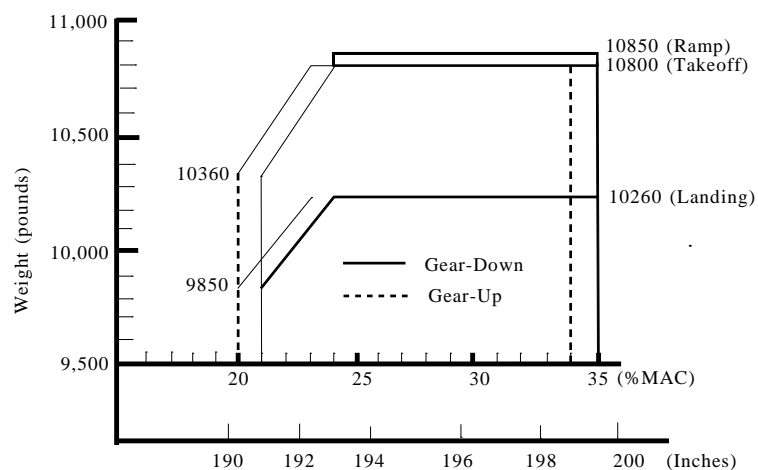
Flap 5°

99 Knots (114 m.p.h.)

Flap 20°

90 Knots (104 m.p.h.)

C.G. Range



Ramp & Takeoff C.G. Ranges	Forward		Aft		Weight Pounds
	In.	%MAC	In.	%MAC	
Gear Up Condition	+190.3	20	+198.8	34	10360
	+192.1	23	+198.8	34	10800
Gear Down Condition	+190.9	21	+199.4	35	10360
	+192.8	24	+199.4	35	10800
	+192.8	24	+199.4	35	10850
Landing C.G. Ranges	Forward		Aft		Weight Pounds
	In.	%MAC	In.	%MAC	
Gear Up Condition	+190.3	20	+198.8	34	9850
	+192.1	23	+198.8	34	10260
Gear Down Condition	+190.9	21	+199.4	35	9850
	+192.8	24	+199.4	35	10260

Straight line variation between points given. Moment change due to gear retraction is -6556 in-lbs.

MU-2B-35 (cont'd)

Maximum weight	Ramp	10,850 lbs.			
	Takeoff	10,800 lbs.			
	Landing	10,260 lbs.			
	Zero fuel	9,775 lbs.			
Number of seats	Maximum 10 (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)		156 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.		366 gal.
	Fuel weights are based on 6.5 lbs./gal.				
	*See Note 1(c) for required fuel usage procedure.				
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	Up	30°	Down	10°
					(If not modified by S/B No. 216)
		Up	30°	Down	1°
					(If modified by S/B No. 216)
	Rudder	Right	24°	Left	22°
	Rudder Tab	Right	25°	Left	25°
	Flap Outboard			Down	40°
Flap Inboard			Down	40°	
Serial Nos. eligible	The Government of Japan Certificate of Airworthiness for Export endorsed as noted under “Import Requirements” must be submitted for each individual aircraft for which application for certification is made.				

II-Model MU-2B-25, 6 ti 9 PCLM (Normal Category), Approved June 16, 1972

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MU-2B-25 (cont'd)

Airspeed Limits (CAS) Cont.

V_{mc} (Minimum control)

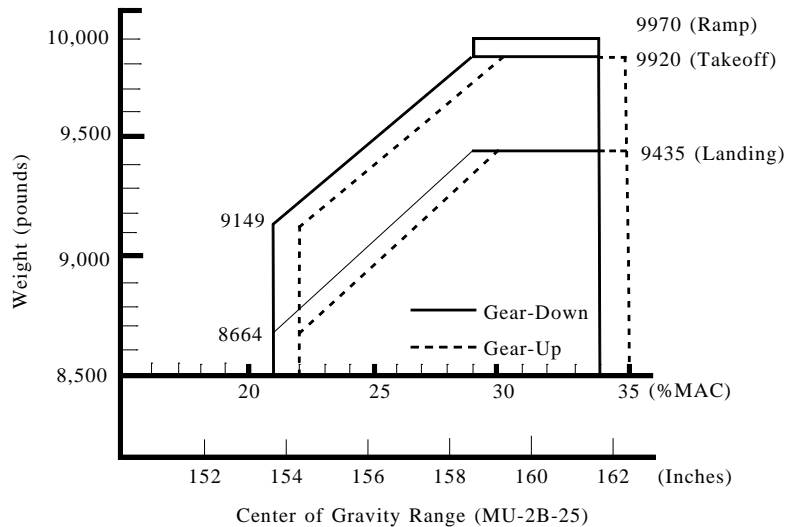
Flap 5°

Flap 20°

100 knots (115 m.p.h.)

93 knots (107 m.p.h.)

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
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 weight	Ramp	9,970 lbs.
	Takeoff	9,920 lbs.
	Landing	9,435 lbs.
	Zero fuel	9,271 lbs.

No. of seats Maximum 9 (Pilot at +97.2)

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

capacity	<u>TOTAL CAP</u>	<u>USABLE</u>
Wing Tank	159gal. (+169.3)	156gal.
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.	366 gal.

Fuel weights are based on 6.5 lbs./gal.

*See Note 1(c) for required fuel usage procedure.

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

MU-2B-25 (cont'd)

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	Up	30°	Down	10°
					(If not modified by S/B No. 216)
		Up	30°	Down	1° (If modified by S/B No. 216)
	Rudder	Right	25°	Left	22°
	Rudder Tab	Right	25°	Left	25°
	Flap Outboard			Down	40°
	Flap Inboard			Down	40°

Serial Nos. eligible The Government of Japan Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for certification is made.

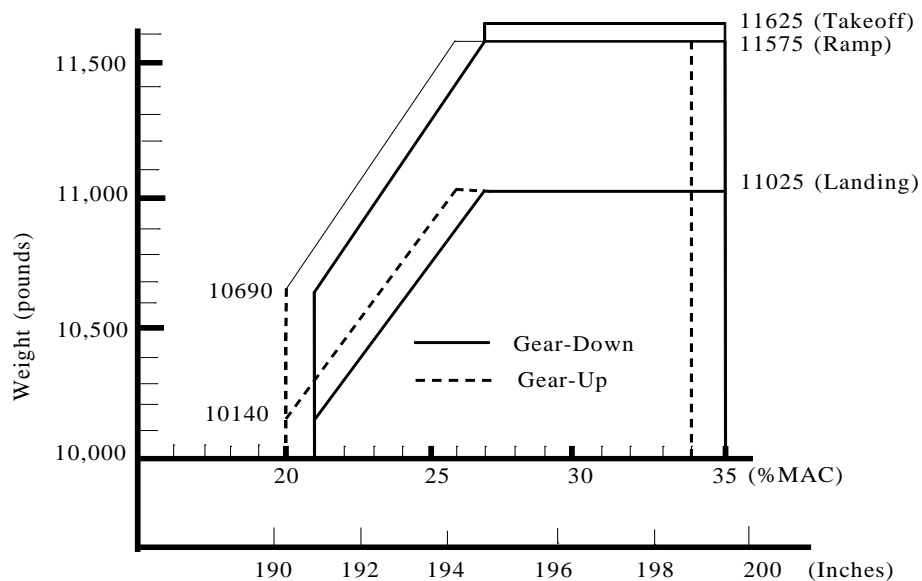
III-Model MU-2B-36, 8 to 10 PCLM (Normal Category), Approved July 23, 1974.

Engines	2 Honeywell (AiResearch/Garrett)	TPE331-6-251M, or
	2 Honeywell (AiResearch/Garrett)	TPE331-6A-251M, or
	2 Honeywell (AiResearch/Garrett)	TPE331-6-252M, or
	2 Honeywell (AiResearch/Garrett)	TPE331-6A-252M
	Propeller-shaft to engine-rotor ratio	1: 20.865
Fuel	Fuels as designated	
	ASTM D1655-68T Aviation Turbine Fuels	Type Jet A, JET A-1 and Jet B
	MIL-T-5624G-1 Turbine Fuel	Grade JP-4 and JP-5
	MIL-F-5616-1 Fuel	Grade JP-1
	MIL-F-46005A (MR) -I Fuel	Type I and II
	British Ministry of Supply Specifications	(a) D.Eng.R.D.2482 Issue No.2
		(b) D.Eng.R.D.2486 Issue No.2
		(c) D.Eng.R.D.2494 Issue No.4
	MIL-G-5572D Aviation Gasoline	Grade 80/87
		(as emergency fuel only)
		Grade 100/130
		(as emergency fuel only)
Oil	Oil brands and trade names conforming to MIL-L-23699 or MIL-L-7808 are Approved lubricants. (See Allied Signal Aerospace Company Service Information Letter SIL P331-2 latest revision.)	
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
	Maximum continuous	715
	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 101.5% for 5 minutes. 100% propeller shaft speed is defined as 2,000 r.p.m.	
Propeller and Propeller Limits	2 Hartzell	HC-B3TN-5(C or E or M)/T10178B-11 with 3 blades each, or
	2 Hartzell	HC-B3TN-5(C or E or M)/T10178B-11R with 3 blades each, or
	2 Hartzell	HC-B3TN-5(C or E or M)/T10178NB-11 with 3 blades each, or
	2 Hartzell	HC-B3TN-5(C or E or M)/T10178NB-11R with 3 blades each
	See Note 6 and 8.	
	Diameter	90-3/8 inches

Model MU-2B-36 (cont'd)

Propeller (cont.)	Pitch setting at 30 in. Station	
	Flight Idle	12°
	Feathered	87.0° ± 0.5°
	Reverse	-6.5°
Airspeed Limits (CAS)	V _{mo} (maximum operating)	250 knots (287 m.p.h.)
	Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for M _{mo} = .57M	
	V _p (Maneuvering)	191 knots (220 m.p.h.)
	V _{fe} (Flaps extended)	
	Flap 5°	175 knots (201 m.p.h.)
	Flap 20°, 40°	155 knots (178 m.p.h.)
	V _{lo} (Landing gear operating)	175 knot (201 m.p.h.)
	V _{le} (Landing gear extended)	175 knots (201 m.p.h.)
	V _{mc} (Minimum control)	
	Flap 5	99 knots (114 m.p.h.)
	Flap 20°	99 knots (114 m.p.h.)

C.G. Range



Ramp & Takeoff C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up Condition	+190.3	20	+198.8	34	10690
	+194.0	26	+198.8	34	11575
Gear Down Condition	+190.9	21	+199.4	35	10690
	+194.6	27	+199.4	35	11575
	+194.6	27	+199.4	35	11625
Landing C.G. Ranges	Forward		Aft		Weight
	In.	%MAC	In.	%MAC	Pounds
Gear Up Condition	+190.3	20	+198.8	34	10140
	+194.0	26	+198.8	34	11025
Gear Down Condition	+190.9	21	+199.4	35	10140
	+194.6	27	+199.4	35	11025

Straight line variation between points given.

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

Model MU-2B-36 (cont'd)

Maximum weight	Ramp	11,625 lbs.			
	Take off	11,575 lbs.			
	Landing	11,025 lbs.			
	Zero fuel	9,943 lbs.			
No. of seats	Maximum 10 (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	159gal. (+204.5)		156gal.	
	Outer Tank (2 at 15 gal.ea.)	30gal. (+201.0)		30 gal.	
	Tip Tank (2 at 93 gal. ea.)*	186gal. (+193.1)		180 gal.	
	Total	375gal.		366 gal.	
	Fuel weights are based on 6.5 lbs./gal.				
	*See Note 1(c) for required fuel usage procedure.				
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	Up	30°	Down	10°
					(If not modified by S/B No. 216)
		Up	30°	Down	1°
					(If modified by S/B No. 216)
	Rudder	Right	24°	Left	22°
	Rudder Tab	Right	25°	Left	25°
	Flap Outboard			Down	40°
	Flap Inboard			Down	40°
Serial Nos. eligible	The Government of Japan Certificate of Airworthiness for Export endorsed as noted under “Import Requirements” must be submitted for each individual aircraft for which application for certification is made.				

VI-Model MU-2B-26, 6 to 9 PCLM (Normal Category), Approved July 23, 1974.

Engines	2	Honeywell (AiResearch/Garrett)	TPE331-6-251M, or
	2	Honeywell (AiResearch/Garrett)	TPE331-6A-251M, or
	2	Honeywell (AiResearch/Garrett)	TPE331-6-252M, or
	2	Honeywell (AiResearch/Garrett)	TPE331-6A-252M
	Propeller-shaft to engine-rotor ratio		1: 20.865
Fuel	Fuels as designated		
	ASTM D1655-68T Aviation Turbine Fuels		Type Jet A, JET A-1 and Jet B
	MIL-T-5624G-1 Turbine Fuel		Grade JP-4 and JP-5
	MIL-F-5616-1 Fuel		Grade JP-1
	MIL-F-46005A (MR) -1 Fuel		Type I and II
	British Ministry of Supply Specifications		(a) D.Eng.R.D.2482 Issue No.2 (b) D.Eng.R.D.2486 Issue No.2 (c) D.Eng.R.D.2494 Issue No.4
	MIL-G-5572D Aviation Gasoline		Grade 80/87 (as emergency fuel only) Grade 100/130 (as emergency fuel only)

Oil
Oil brands and trade names conforming to MIL-L-23699 or MIL-L-7808 are approved lubricants. (See Allied Signal Aerospace Company Service Information Letter SIL P331-2 latest revision.)

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 101.5% for 5 minutes. 100% propeller shaft speed is defined as 2,000 r.p.m.

Propeller and Propeller Limits	2	Hartzell	HC-B3TN-5(C or E or M)/T10178B-11 with 3 blades each, or
	2	Hartzell	HC-B3TN-5(C or E or M)/T10178B-11R with 3 blades each, or
	2	Hartzell	HC-B3TN-5(C or E or M)/T10178NB-11 with 3 blades each, or
	2	Hartzell	HC-B3TN-5(C or E or M)/T10178NB-11R with 3 blades each
	See Note 6 and 8		
	Diameter		90-3/8 inches

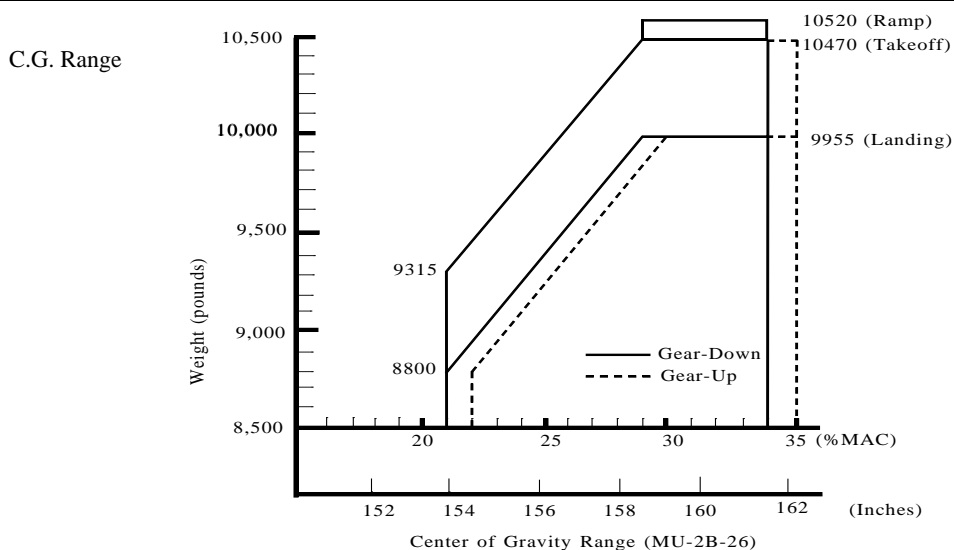
Pitch setting at 30 in. station

Flight idle	12°
Feathered	87.0° ± 0.5°
Reverse	-6.5°

Airspeed Limits (CAS)

Vmo (maximum operating)	250 knots (287 m.p.h.)
Decrease by 5 knots per 1,000 ft. above 21,300 ft. to account for Mmo = .57M	
Vp (Maneuvering)	182 knots (209 m.p.h.)
Vfe (Flaps extended)	
Flap 5°	175 knots (201 m.p.h.)
Flap 20°, 40°	155 knots (178 m.p.h.)
Vlo (Landing gear operating)	170 knots (196 m.p.h.)
Vle (Landing gear extended)	170 knots (196 m.p.h.)
Vmc (Minimum control)	
Flap 5°	100 knots (115 m.p.h.)
Flap 20°	93 knots (107 m.p.h.)

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 weight	Ramp	10,520 lbs.
	Takeoff	10,470 lbs.
	Landing	9,955 lbs.
	Zero fuel	9,710 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 +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. (+204.5)
	Outer Tank (2 at 15 gal. ea.)	30 gal. (+201.0)
	Tip Tank (2 at 93 gal. ea.)*	186 gal. (+193.1)
	Total	375 gal.
	Fuel weights are based on 6.5 lbs./gal.	366 gal.
Oil Capacity	Total 3.1 gal.(1.55 gal. each tank) (+138.7)	
	*See Note 1 (c) for required fuel usage procedure.	
Maximum Operating Altitude	25,000 ft. (Ships of cabin differential pressure 5 psi-nominal)	
	28,000 ft. (Ships of cabin differential pressure 6 psi-nominal)	

MU-2B-26 (cont'd)

Control Surface Movements	Spoiler	Up	60°		
	Aileron Trim	Up	20°	Down	20°
	Elevator	Up	33°	Down	10°
	Elevator Tab	Up	30°	Down	10° (If not modified by S/B No. 216)
		Up	30°	Down	1° (If modified by S/B No. 216)
	Rudder	Right	25°	Left	22°
	Rudder Tab	Right	25°	Left	25°
	Flap Outboard			Down	40°
	Flap Inboard			Down	40°
Serial Nos. eligible	The Government of Japan Certificate of Airworthiness for Export endorsed as noted under “Import Requirements” must be submitted for each individual aircraft for which application for certification is made.				
<u>Data Pertinent to All Model</u>					
Datum	Nose of fuselage for Models MU-2B, MU-2B-10, MU-2B-20, MU-2B-15, MU-2B-25, MU-2B-26 (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-30, MU-2B-35, MU-2B-36 (Forward 220.67 in. (5605 mm) from front plane of wing rear spar fuselage connecting frame).				
MAC	60.55 in. (Leading edge of MAC is at +141.03 (MU-2B, MU-2B-10, MU-2B-20, MU-2B-15, MU-2B-25, and MU-2B-26), and at +178.23 (MU-2B-30, MU-2B-35, and MU-2B-36).				
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, MU-2B-10, MU-2B-20, MU-2B-15, MU-2B-25 and MU-2B-26.				
	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-30, MU-2B-35, and MU-2B-36.				
Certification basis	CAR 10 dated March 28, 1955. (Applicable regulations are 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.				
	Type Certificate No. A2PC issued November 4, 1965.				
	Application for Type Certificate dated November 25, 1964.				
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 Reports 5ET65196(MU-2B), YET66131 (MU-2B-10), YET68004 (MU-2B-20), YET-68027 (MU-2B-15), YET 69069(MU-2B-30) and YET 70176(MU-2B-35), YET 71354(MU-2B-25), YET-74194 (MU-2B-26) and YET 74196(MU-2B-36), contain lists of all required equipment as well as optional equipment installations approved by the JCAB.				
Import requirements	Each aircraft and any replacement parts manufactured in Japan and exported to the United States must be designated as “Import” and clearly labeled as such in accordance with CAR 10.30. A U.S. certificate of Airworthiness may be issued on the basis of a Japanese Certificate of Airworthiness for export signed by a representative of the JCAB containing the following notation.				
	“The aircraft covered by this certificate has been found to conform to Type Certificate Number A2PC and is in a condition for safe operation.”				

Model MU-2B (cont'd)

- 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 certificated empty weight and corresponding center of gravity location must include unusable fuel and undrainable oil as follows:
- | | |
|------------------------------|--|
| Unusable Fuel (MU-2B) | 65.0 lbs. at (+167.3) |
| Unusable Fuel (MU-2B-10) | 19.5 lbs. at (+167.3) (Standard) |
| | 58.5 lbs. at (+159.7) (Extended Range) |
| Unusable Fuel (MU-2B-20) | 58.5 lbs. at (+159.7) |
| Unusable Fuel (MU-2B-15) | 58.5 lbs. at (+159.7) |
| Unusable Fuel (MU-2B-30) | 58.5 lbs. at (+196.9) |
| Unusable Fuel (MU-2B-35) | 58.5 lbs. at (+196.9) |
| Unusable Fuel (MU-2B-25) | 58.5 lbs. at (+159.7) |
| Unusable Fuel (MU-2B-26) | 58.5 lbs. at (+159.7) |
| Unusable Fuel (MU-2B-36) | 58.5 lbs. at (+196.9) |
| Undrainable oil (All Models) | 0 lbs. |
- (c) The fuel quantity of each tip tank must not be more than 45 gallons, Model MU-2B, and not more than 65 gallons, Model MU-2B-10 (Extend Range), MU-2B-20, MU-2B-15, MU-2B-30, MU-2B-35, MU-2B-25, and MU-2B-26, MU-2B-36, before landing.
- Note 2 This aircraft must be operated in accordance with the JCAB approved Airplane Flight Manual.
- Note 3 (Delete)
- Note 4 (a) Model MU-2B-10 can be converted to Model MU-2B-15 by complying with the provisions of Service Recommendation No. 086.
- (b) Model MU-2B-25 can be converted to Model MU-2B-20 by complying with the provisions of Service Recommendation No. 013.
- (c) Model MU-2B-35 can be converted to Model MU-2B-36 by complying with the provisions of Service Recommendation No. 020.
- (d) Model MU-2B-25 can be converted to Model MU-2B-26 by complying with the provisions of Service Recommendation No. 021.
- Note 5 Mitsubishi Heavy Industries America Inc; Addison, Texas 75001, is licensed by Mitsubishi Heavy Industries, Ltd. to maintain the type design and to manufacture replacement and modification parts for Model MU-2B series airplanes listed in this type certificate data sheet.
- Note 6 Airworthiness Directive – AD 2003-04-23, mandated that 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/-10/-15/-20/-25/-26/-30/-35/-36. Removed Blade: T10176 H (B)-5, T10176H (K)-5, T10176H-5, T10176HSB-5, T10178H-11R, T10178H (B)-11, T10178H (B)-11R Replaced By: T10176 (N) SB-5, T10178 (N) B-11, T10178 (N) B-11R
- Note 7 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 8 Updated the propeller hubs and blades per Hartzell TC Data Sheet P15EA, Note 6(a) and (c)
- Note 9 The following serial number aircraft are no longer eligible for a standard airworthiness certificate; MU-2B: S/N 4,6 thru 35,37,38; MU-2B-10: S/N 101, 103 to 111, 113, 116, 117, 119 and 120; MU-2B-15: S/N 114, 115 and 118.

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