DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

	A1CE
	Revision 38
	Textron Aviation
19A	B23
B19	C23
M19A	A24
23	A24R
A23	B24R
A23A	C24R
A23-19	
A23-24	
	November 27, 2017

TYPE CERTIFICATE DATA SHEET A1CE

This data sheet which is a part of Type Certificate No. A1CE 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	Beech Aircraft Corporation transferred to Raytheon Aircraft Company on April 15, 1996 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 23, Musketeer, 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved February 20, 1962

Engine	Lycoming O-320-D2B
Fuel	91/96 minimum grade aviation gasoline
*Engine limits	For all operations, 2700 rpm (160 hp.)

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I. Model 23 (cont'd)

Propeller and propeller limits

Sensenich M74DM-0-60
Static rpm at maximum throttle setting: Not over 2400, not under 2300
Diameter: 74 in., no cutoff permitted

OR Flottorp F1C-7660-2
Static rpm at maximum throttle setting: Not over 2400, not under 2300
Diameter: 74 in., no cutoff permitted

OR Sensenich M74DM-0-56
Static rpm at maximum throttle setting: Not over 2400, not under 2300
Diameter: 74 in., no cutoff permitted

OR Sensenich 74DM6-0-60
Static rpm at maximum permissible throttle setting: Not over 2400, not under 2300
Diameter: 74 in., no cutoff permitted

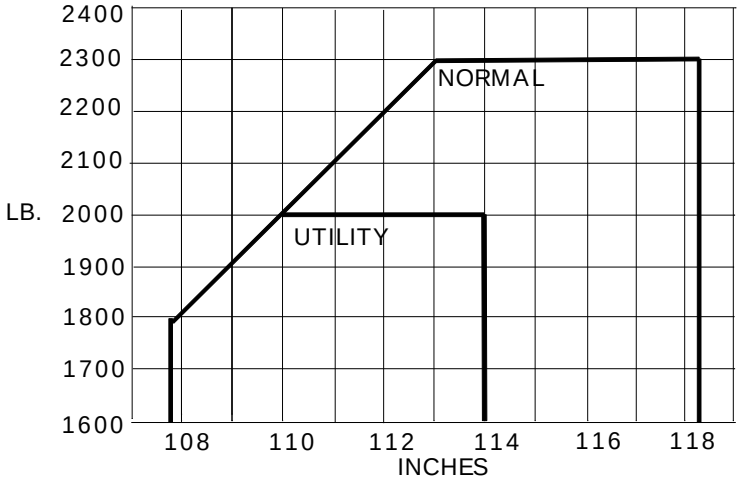
OR Sensenich 74DM6-0-56
Static rpm at maximum permissible throttle setting: Not over 2400, not under 2300
Diameter: 74 in., no cutoff permitted

* Airspeed limits (CAS)

Never exceed	171 mph. (148 knots)
Maximum structural cruising	151 mph. (131 knots)
Maneuvering	132 mph. (115 knots)
Flaps extended	110 mph. (95 knots)

C.G. range

Normal category:
(+113.0) to (+118.3) at 2300 lb.
(+107.8) to (+118.3) at 1800 lb. or less
Utility category:
(+109.9) to (+114.0) at 2000 lb.
(+107.8) to (+114.0) at 1800 lb. or less
Straight line variation between points given



Empty weight C.G. range: None

Leveling means: Baggage compartment floor

Maximum weights: 2300 lb. (Normal Category)
2000 lb. (Utility Category)

I. Model 23 (cont'd)

No. of seats		4 (2 at +110, 2 at +142)
Maximum baggage		140 lb. (+167)
Fuel capacity		Tank: L&R main; Capacity Gal.: 29.9 ea.; Usable Gal.: 29.4 ea.; Arm: +117.0 See NOTE 1 for data on unusable fuel
	OR	L&R main; Capacity Gal.: 29.9 ea.; Usable Gal.: 26.1 ea.; Arm: +117.0 See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with.
Oil capacity		8 qt. (+50) See NOTE 1 for unusable oil

Control surface movements					
Wing flaps	Down	30° ±1°			
Aileron	Down	10° ±2°	Up	20° ±2°	
Rudder	Right	25° ±2°	Left	25° ±2°	
Stabilizer	Down	2° ±2°	Up	15° ±2°	

Serial Nos. eligible		M-2 through M-554, except M-3

II. Model A23, Musketeer II, 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved June 7, 1963

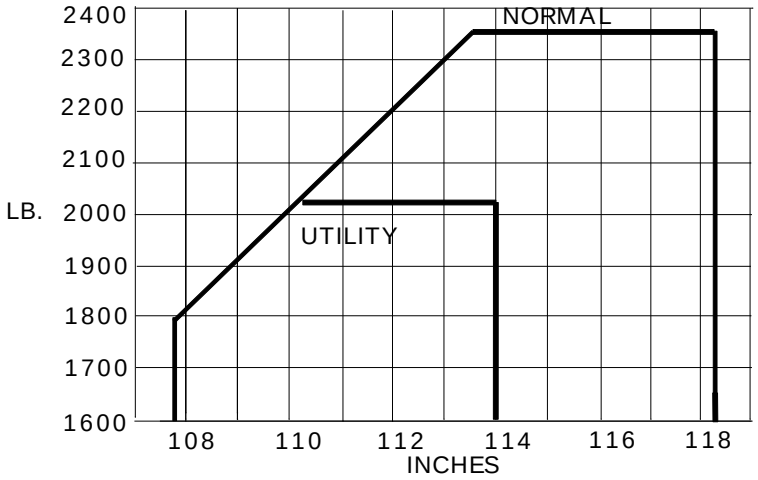
Engine		Continental IO-346-A
Fuel		91/96 minimum grade aviation gasoline
Engine limits		For all operations, 2700 rpm (165 hp.)
Propeller and propeller limits		Flottorp FIA-7660-2 Static rpm at maximum permissible throttle setting: Not over 2400, not under 2300
	OR	Sensenich M74DC-0-60 Maximum and minimum diameter limit 74 in., no cutoff permitted.
	OR	Sensenich M74DC-0-56 Maximum and minimum diameter limit 74 in., no cutoff permitted.
	OR	Sensenich 74DC-0-60 Maximum and minimum diameter limit 74 in., no cutoff permitted.
	OR	Sensenich 74DC-0-56 Maximum and minimum diameter limit 74 in., no cutoff permitted.

*	Airspeed limits (CAS)	Never exceed	175 mph. (152 knots)
		Maximum structural cruising	153 mph. (132 knots)
		Maneuvering	133 mph. (115 knots)
		Flaps extended	110 mph. (95 knots)

II. Model A23 (cont'd)

C.G. range

Normal category:
(+113.5) to (+118.3) at 2350 lb.
(+107.8) to (+118.3) at 1800 lb. or less
Utility category:
(+110.2) to (+114.0) at 2030 lb.
(+107.8) to (+114.0) at 1800 lb. or less
Straight line variation between points given



Empty weight C.G. range: None

Leveling means: Baggage compartment floor

Maximum weights: 2350 lb. (Normal Category)
2030 lb. (Utility Category)

No. of seats: 4 (2 at +110, 2 at +142)

Maximum baggage: 140 lb. (+167)

Fuel capacity

Tank	Capacity Gal.	Usable Gal.	Arm
L&R main	29.9 ea.	29.4 ea.	+117.0

See NOTE 1 for data on unusable fuel

OR

Tank	Capacity Gal.	Usable Gal.	Arm
L&R main	29.9 ea.	26.1 ea.	+117.0

See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with

Oil Capacity: 8 qt. at +48.
See NOTE 1 for unusable oil

Control surface movements

Wing flaps	Down	35° ±1°		
Aileron	Down	10° ±2°	Up	20° ±2°
Rudder	Right	25° ±2°	Left	25° ±2°
Stabilizer	Down	2° ±2°	Up	15° ±2°

Serial Nos. eligible: M-3, M-555 through M-900

III. Model A23A, 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved November 5, 1965

Engine: Continental IO-346-A

Fuel — 91/96 minimum grade aviation gasoline

Engine limits — For all operations, 2700 rpm (165 hp.)

Propeller and propeller limits

Flottorp FIA-7660-2
Static rpm at maximum permissible throttle setting: Not over 2400, not under 2300

OR Sensenich M74DC-0-60
Maximum and minimum diameter limit 74 in., no cutoff permitted.

OR Sensenich M74DC-0-56
Maximum and minimum diameter limit 74 in., no cutoff permitted.

OR Sensenich 74DC-0-60
Maximum and minimum diameter limit 74 in., no cutoff permitted.

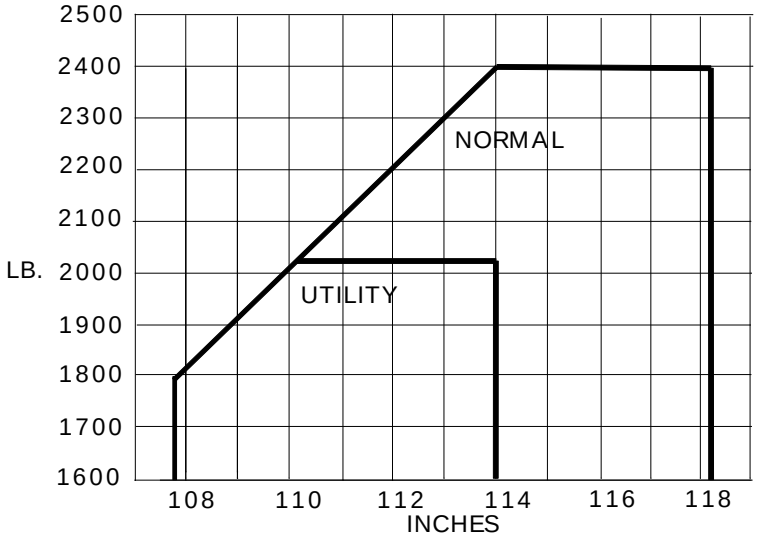
OR Sensenich 74DC-0-56
Maximum and minimum diameter limit 74 in., no cutoff permitted.

* Airspeed limits (CAS)

Never exceed	175 mph. (152 knots)
Maximum structural cruising	155 mph. (132 knots)
Maneuvering	135 mph. (115 knots)
Flaps extended	110 mph. (95 knots)

C.G. range

Normal category:
(+114.0) to (+118.3) at 2400 lb.
(+107.8) to (+118.3) at 1800 lb. or less
Utility category:
(+110.2) to (+114.0) at 2030 lb.
(+107.8) to (+114.0) at 1800 lb. or less
Straight line variation between points given



III. Model A23A (cont'd)

Empty weight C.G. range		None
Leveling means		Baggage compartment floor
Maximum weights		2400 lb. (Normal Category) 2030 lb. (Utility Category)
No. of seats		4 (2 at +110, 2 at +142)
Maximum baggage		270 lb. (+167)
Fuel capacity		Tank: L&R main; Capacity Gal.: 29.9 ea.; Usable Gal.: 29.4 ea.; Arm: +117.0 See NOTE 1 for data on unusable fuel
	OR	L&R main; 29.9 ea.; 26.1 ea.; +117.0 See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with
Oil Capacity		8 qt. at +48. See NOTE 1 for unusable oil
Control surface movements		Wing flaps: Down 35° ±1° Aileron: Down 10° ±2°; Up 20° ±2° Rudder: Right 25° ±2°; Left 25° ±2° Stabilizer: Down 2° +2°, -1°; Up 15° ±2°
Serial Nos. eligible		M-901 through M-1094

IV. Model A23-19, 2 or 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved December 9, 1965

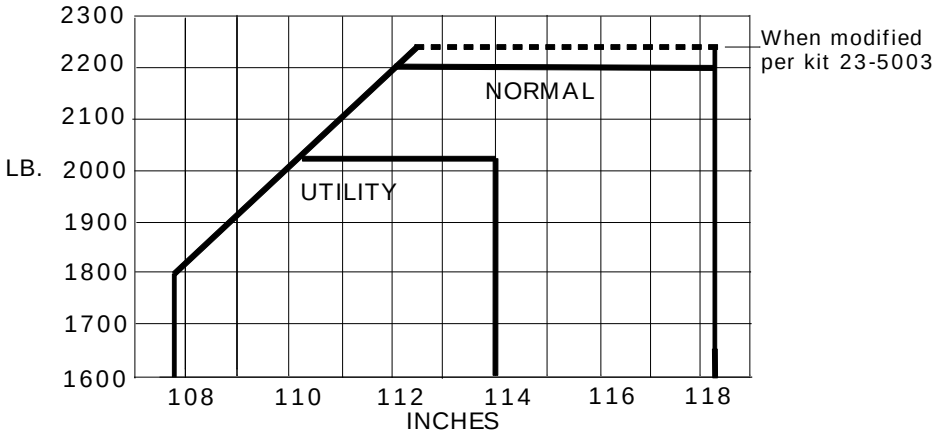
Engine		Lycoming O-320-E2B, E2C or E3D
Fuel		80/87 minimum grade aviation gasoline
Engine limits		For all operations, 2700 rpm (150 hp.)
Propeller and propeller limits		Sensenich M74DM-0-58 Static rpm at maximum permissible throttle setting: Not over 2400, not under 2300
	OR	Sensenich 74DC-0-58 Static rpm at maximum throttle setting: Not over 2400, not under 2300

*	Airspeed limits (CAS)	Never exceed	175 mph. (152 knots)
		Maximum structural cruising	154 mph. (134 knots)
		Maneuvering	133 mph. (115 knots)
		Flaps extended	110 mph. (95 knots)

IV. Model A23-19 (cont'd)

C.G. range

Normal category:
(+112.0) to (+118.3) at 2200 lb.
OR (+112.5) to (+118.3) at 2250 lb. when modified per Kit 23-5003.
(+107.8) to (+118.3) at 1800 lb. or less
Utility category:
(+110.2) to (+114.0) at 2030 lb.
(+107.8) to (+114.0) at 1800 lb. or less
Straight line variation between points given



Empty weight C.G. range: None

Leveling means: Cabin floor aft of front seats

Maximum weights: 2200 Lb. (Normal Category)
2030 lb. (Utility Category)

No. of seats: 4 maximum (2 at +110, 2 at +143)

Maximum baggage: 340 lb. (+142)

Fuel capacity

Tank	Capacity Gal.	Usable Gal.	Arm
L&R main	29.9 ea.	29.4 ea.	+117.0

See NOTE 1 for data on unusable fuel

OR

Tank	Capacity Gal.	Usable Gal.	Arm
L&R main	29.9 ea.	26.1 ea.	+117.0

See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with

Oil Capacity: 8 qt. at +48.
See NOTE 1 for unusable oil

Control surface movements

Wing flaps	Down	35°	±1°		
Aileron	Down	10°	±2°	Up	20° ±2°
Rudder	Right	25°	±2°	Left	25° ±2°
Stabilizer	Down	2°	+2°, -1°	Up	15° ±2°

Serial Nos. eligible: MB-1 through MB-288

V. Model A23-24, 4 or 6 PCLM (Normal Category), 2 PCLM (Utility Category), Approved March 7, 1966
Model A24, 4 or 6 PCLM (Normal Category), 2 PCLM (Utility Category), Approved February 5, 1970

Engine
Lycoming IO-360-A2B or A2D
OR Lycoming IO-360-A1B or A1D (Constant speed propeller only)

Fuel
100/130 minimum grade aviation gasoline

*Engine limits
For all operations, 2700 rpm (200 hp.)

Propeller and propeller limits
(1) McCauley 1B235/BFA 7862 (with 4 in. spacer, P/N B3637)
Diameter: not over 78 in., not under 76.5 in.
Static rpm at maximum throttle setting: Not over 2350, not under 2250
OR (2) McCauley constant speed propeller (Model A23-24 only)
(a) 2D34C8/78FB-1.5, 2 blades aluminum alloy
Diameter: not over 76.5 in., not under 76.5 in.
No cutoff permitted
Pitch settings at 30 in. sta.: low 13.2°, high 27.5°
Caution: Avoid continuous operation between 2000 and 2150 rpm above 20 in. manifold pressure
(b) McCauley hydraulic governor C290D2B/T3, C290D2C/T3 or C290D2D/T3
(c) McCauley spinner assembly D-3683
OR (3) McCauley 1B235/BFA 7762 (with 4 in. spacer P/N B3637)
Diameter: not over 77 in., not under 76.5 in.
Static rpm at maximum throttle setting: not over 2350, not under 2250
OR (4) McCauley constant speed propeller (Models A23-24 and A24)
(a) 2D34C9/78FBM-1.5, 2 blades, aluminum alloy
Diameter: not over 76.5 in. not under 76.5 in.
No cutoff permitted
Pitch settings at 30 in. station: low 14.2°, high 27.5°
Caution: Avoid continuous operation between 2000 and 2150 rpm above 20 in. manifold pressure

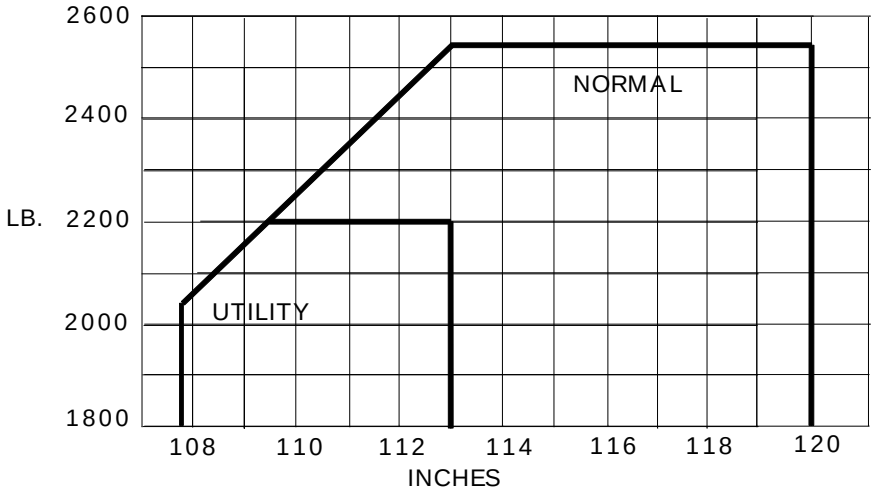
* Airspeed limits (CAS)

Never exceed	175 mph. (152 knots)
Maximum structural cruising	155 mph. (135 knots)
Maneuvering	140 mph. (122 knots)
Flaps extended	110 mph. (95 knots)

V. Model A23-24, Model A24 (cont'd)

C.G. range

Normal category:
(+113.0) to (+120.0) at 2550 lb.
(+107.8) to (+120.0) at 2050 lb. or less.
Utility category:
(+109.5) to (+113.0) at 2200 lb.
(+107.8) to (+113.0) at 2050 lb. or less
Straight line variation between points given



Empty weight C.G. range

None

Leveling means

Baggage compartment floor

Maximum weights

2550 lb. (Normal Category)
2200 lb. (Utility Category)

No. of seats

6 maximum (2 at +110, 2 at +147, 2 at +175))

Maximum baggage

270 lb. (+167)

Fuel capacity

Tank	Capacity Gal.	Usable Gal.	Arm
L&R main	29.9 ea.	29.4 ea.	+117.0

See NOTE 1 for data on unusable fuel

OR

Tank	Capacity Gal.	Usable Gal.	Arm
L&R main	29.9 ea.	26.1 ea.	+117.0

See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with

Oil Capacity

8 qt. (+50.0)
See NOTE 1 for unusable oil

Control surface movements

Wing flaps	Down	35°	±1°		
Aileron	Down	10°	±2°	Up	20° ±2°
Rudder	Right	25°	±2°	Left	25° ±2°
Stabilizer	Down	2°	+2°, -1°	Up	15° ±2°

Serial Nos. eligible

MA-1 through MA-363 (Model A23-24)
MA-364 through MA-368 (Model A24)

VI. Model 19A, 2 or 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved August 31, 1967
2 PCLM (Acrobatic Category), Approved March 12, 1968
Model M19A, 2 PCLM (Normal, Utility and Acrobatic Category), Approved December 9, 1969
Model B19, 2 or 4 PCLM Normal Category), 2 PCLM (Utility and Acrobatic Category),
Approved February 13, 1970

Engine		Lycoming O-320-E2B, E2C or E3D
Fuel		80/87 minimum grade aviation gasoline
*Engine limits		For all operations, 2700 r.p.m. (150 hp.)
Propeller and propeller limits		Sensenich M74DM-0-58 (19A, M19A) Diameter: 74 in. No cutoff permitted Static rpm at maximum throttle setting: Not over 2400, not under 2300
	OR	Sensenich 74DM6-0-58 (19A, M19A) Diameter: 74 in. No cutoff permitted Static rpm at maximum throttle setting: Not over 2400, not under 2300
	OR	Sensenich 74DM6S5-0-58 (Model B19 only, Serial Nos. MB-481 through MB-616 at 2000 lb. wt. limit). Diameter: 74 in. No cutoff permitted Static rpm at maximum throttle setting: Not over 2400, not under 2300
	OR	Sensenich 74DM6S5-0-54 (Model B19 at 2150 lb. wt. limit) Diameter: 74 in. No cutoff permitted Static rpm at maximum throttle setting: Not over 2550, not under 2400

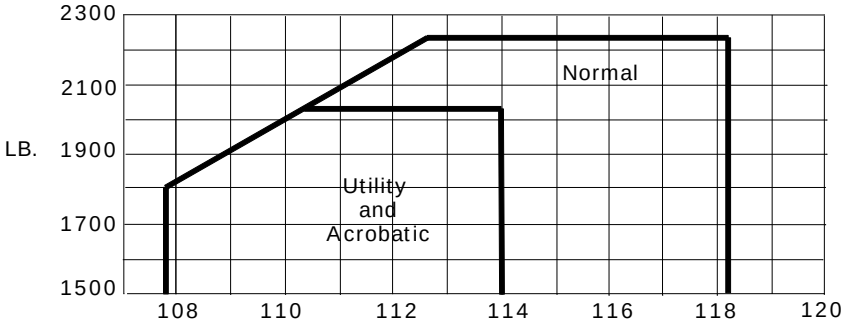
*	Airspeed limits (CAS)	Never exceed	175 mph. (152 knots)
		Maximum structural cruising	154 mph. (134 knots)
		Maneuvering	133 mph. (115 knots)
		Flaps extended	110 mph. (95 knots)

C.G. range

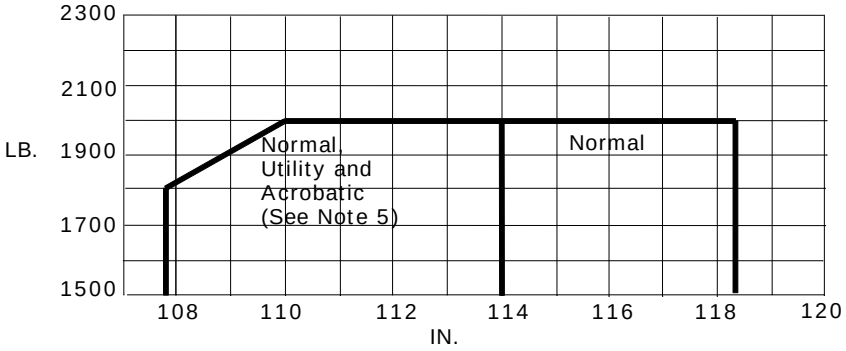
Normal category:
(+112.5) to (+118.3) at 2250 lb. (Model 19A and M19A only)
(+111.4) to (+118.3) at 2150 lb. (Model B19 only, S/N MB-617 and on
S/N MB-481 through MB-616 when modified per Beech Kit 23-9014)
(+109.9) to (+118.3) at 2000 lb. (Model B19 only, S/N MB-481 through MB-616)
(+107.8) to (+118.3) at 1800 lb. or less

Utility and Acrobatic category: (See NOTE 5)
(+110.2) to (+114.0) at 2030 lb.
(+109.9) to (+114.0) at 2000 lb. (Model B19 only, S/N MB-481 through MB-616)
(+107.8) to (+114.0) at 1800 lb. or less
Straight line variation between points given

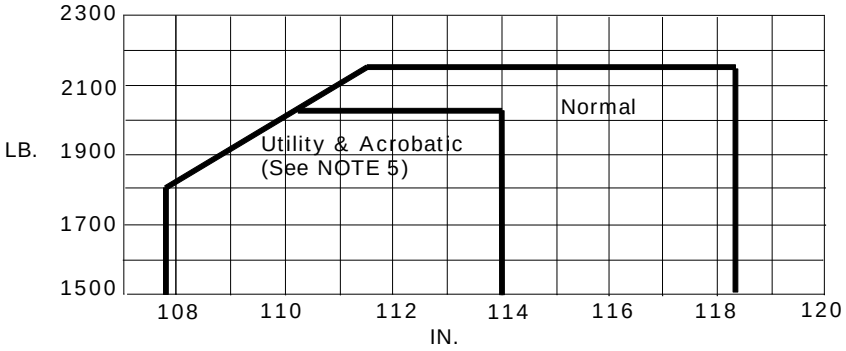
VI. Model 19A, Model M19A, Model B19 (cont'd)



Models 19A and M19A only.



Model B19 only (S/N MB-481 through MB-616)



Model B19 only, MB-617 and after and S/N MB-481 through MB-616 when modified per Beech Kit 23-9014.

VI. Model 19A, Model M19A, Model B19 (cont'd)

Empty weight C.G. range: None

Leveling means: Cabin floor aft of front seats

Maximum weights:
2250 Lb. (Normal Category) Models 19A and M19A only.
2150 lb. (Normal Category) (Model B19 only, S/N MB-617 and after and S/N MB-481 through MB-616 when modified per Beech Kit 23-9014)
2030 lb. (Utility and Acrobatic Category) (See NOTE 5)
2000 lb. (Normal, Utility and Acrobatic Category) (Model B19 only, S/N MB-481 through MB-616) (See NOTE 5)

No. of seats:
4 maximum (2 at +110, 2 at +143)
2 maximum (2 at +110, M19A only)

Maximum baggage: 340 lb. (+142)

Fuel capacity:

	Tank	Capacity Gal.	Usable Gal.	Arm
	L&R main	29.9 ea.	29.4 ea.	+117.0
	See NOTE 1 for data on unusable fuel			
OR	L&R main	29.9 ea.	26.1 ea.	+117.0
	See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with			
OR	L&R main (MB-814, MB-817 and up)	29.9 ea.	28.6 ea.	+117.0
	See NOTE 1(e) for data on unusable fuel			

Oil Capacity:
8 qt. (+48)
See NOTE 1 for unusable oil

Control surface movements:

Wing flaps	Down	35°	±1°		
Aileron	Down	10°	±2°	Up	20° ±2°
Rudder	Right	25°	±2°	Left	25° ±2°
Stabilizer	Down	2°	+2°, -1°	Up	15° ±2°

Serial Nos. eligible:
MB-289 through MB-460 (Normal and Utility) (Model 19A)
MB-289 through MB-460 (Acrobatic Category) when modified by Beech Drawing COC46786 (Model 19A)
MB-461 through MB-480 (Normal, Utility and Acrobatic Category) (Model M19A) when modified by Beech Kit 23-9021-1S are not eligible for U.S. Registration (See NOTE 9)
MB-481 and on (Normal and Utility Category) (Model B19)
MB-481 and on (Acrobatic Category) (Model B19) (See NOTE 5)
MB-635 through MB-654, except MB-649, are modified by Beech Kit 23-9016-1-S (Reference Section VII for operational limitations).

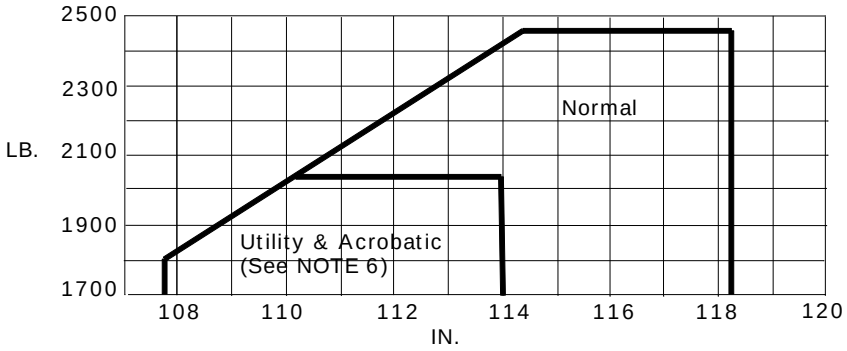
VII. Model B23, 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved December 13, 1967, 2 PCLM (Acrobatic Category), Approved November 22, 1968
Model C23, 4 PCLM (Normal Category), 2 PCLM (Utility and Acrobatic Category), Approved February 13, 1970

	Engine	Lycoming O-360-A2G Lycoming O-360-A4G, A2G, A4J or A4K (Model C23)
	Fuel	91/96 minimum grade aviation gasoline
*	Engine limits	For all operations, 2700 rpm (180 hp.)
	Propeller and propeller limits	Sensenich M76EMMS-0-60 Static rpm at maximum permissible throttle setting: Not over 2350, not under 2250 or Sensenich 76EM8S5-0-60 Static rpm at maximum throttle setting: Not over 2350, not under 2250 Caution: Avoid continuous operation between 2150 to 2350 rpm for aircraft equipped with O-360-A2G engine

*	Airspeed limits (CAS)	Never exceed	175 mph (152 knots)
		Maximum structural cruising	156 mph (135.5 knots)
		Maneuvering	136 mph (118 knots)
		Flaps extended	110 mph (95 knots)

C.G. range

Normal category:
(+114.5) to (+118.3) at 2450 lb.
(+107.8) to (+118.3) at 1800 lb. or less
Utility and Acrobatic category: (See NOTE 6)
(+110.2) to (+114.0) at 2030 lb.
(+107.8) to (+114.0) at 1800 lb. or less
Straight line variation between points given



	Empty weight C.G. range	None
	Leveling means	Baggage compartment floor
	Maximum weights	2450 lb. (Normal Category) 2030 lb. (Utility and Acrobatic Category) (See NOTE 6)
	No. of seats	4 maximum (2 at +110, 2 at +142)

VII. Model B23, Model C23 (cont'd)

Maximum baggage: 270 lb. (+167)

Fuel capacity:

	Tank	Capacity Gal.	Usable Gal.	Arm
	L&R main	29.9 ea.	29.4 ea.	+117.0
	See NOTE 1 for data on unusable fuel			
OR	L&R main	29.9 ea.	26.1 ea.	+117.0
	See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with			
OR	L&R main	29.9 ea.	28.6 ea.	+117.0
	(MB-814, MB-817 an up)			
	See NOTE 1(e) for data on unusable fuel (M-1875, M-1880 and on)			

Oil Capacity: 8 qt. at+48
See NOTE 1 for unusable oil

Control surface movements:

Wing flaps	Down	35°	±1°			
Aileron	Down	10°	±2°	Up	20°	±2°
Rudder	Right	25°	±2°	Left	25°	±2°
Stabilizer	Down	2°	+2°, -1°	Up	15°	±2°

Serial Nos. eligible:
M-1095 through M-1135 (Normal and Utility Category) (B23)
M-1136 through M-1284 (eligible in Acrobatic Category) (Model B23) (See NOTE 4)
M-1285 and on (Normal and Utility Category) (Model C23)
M-1285 and on (Acrobatic Category) (Model C23) (See NOTE 6)

VIII. Model A24R, Sierra 200, 4 or 6 PCLM (Normal Category), 2 PCLM (Utility Category), Approved December 23, 1969

Engine: Lycoming IO-360-A1B or A1D

Fuel: 100/130 minimum grade aviation gasoline

* Engine limits: For all operations, 2700 rpm (200 hp.)

Propeller and propeller limits:
(a) McCauley constant speed propeller
2D34C9/78FBM-1.5, 2 blades aluminum alloy
Diameter: not over 76.5 in., not under 76.5 in.
No cutoff permitted
Pitch settings at 30 in. sta.: low 14.2°, high 27.5°
Caution: Avoid continuous operation between 2000 and 2150 rpm. above 20 in. manifold pressure
(b) McCauley hydraulic governor C290D2B/T3, or C290D2C/T3 or C290D2D/T3
(c) McCauley spinner assembly D-3683

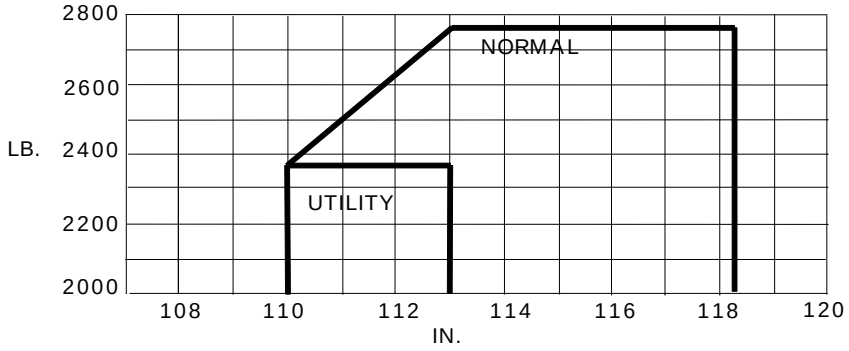
* Airspeed limits (CAS):

Never exceed	193 mph (168 knots)
Maximum structural cruising	165 mph (144 knots)
Maneuvering	144 mph (125 knots)
Flaps extended	110 mph (95 knots)

VIII. Model A24R (cont'd)

C.G. range

Normal category:
(+113.0) to (+118.3) at 2750 lb.
(+110.0) to (+118.3) at 2375 lb. or less
Utility category:
(+110.0) to (+113.0) at 2375 lb. or less
Straight line variation between points given



Empty weight C.G. range

None

Leveling means

Baggage compartment floor

Maximum weights

2750 lb. (Normal Category)
2375 lb. (Utility Category)

No. of seats

6 maximum (2 at +110, 2 at +147, 2 at +175))

Maximum baggage

270 lb. (+167.0)

Fuel capacity

Tank	Capacity Gal.	Usable Gal.	Arm
L&R main	29.9 ea.	29.4 ea.	+117.0

See NOTE 1 for data on unusable fuel

OR

Tank	Capacity Gal.	Usable Gal.	Arm
L&R main	29.9 ea.	26.1 ea.	+117.0

See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with.

Oil Capacity

8 qt. (+50.0)
See NOTE 1 for unusable oil

Control surface movements

Wing flaps	Down	35°	±1°		
Aileron	Down	10°	±2°	Up	20° ±2°
Rudder	Right	25°	±2°	Left	25° ±2°
Stabilizer	Down	2°	+2°, -1	Up	15° ±2°

Serial Nos. eligible

MC-2 through MC-150

IX. Model B24R, Sierra 200, 4 or 6 PCLM (Normal Category), Approved June 18, 1973
Model C24R, Sierra 200, 4 or 6 PCLM (Normal Category), Approved October 1, 1976

Engine — Lycoming IO-360-A1B6

Fuel — 100/130 minimum grade aviation fuel

* Engine limits — For all operations, 2700 r.p.m. (200 hp.)

Propeller and propeller limits

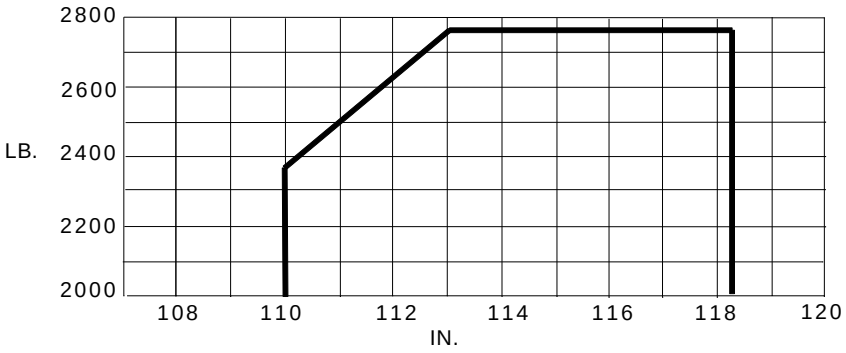
(a) Hartzell constant speed propeller
HC-M2YR-1BF/F7666A-2R 2 blades aluminum alloy
Diameter: not over 74 in., not under 74 in.
No cutoff permitted
Pitch setting at 30 in. station: low 14.4° ±0.2°, high 29.0° ±2.0°
(Model B24R only, MC-152 through MC-448, MC-450 and MC-451)
(b) Woodward hydraulic governor A210490
(c) Hartzell spinner assembly A2298-2P
(d) Hartzell constant speed propeller
HC-M2YR-1BF/F7666A 2 blades aluminum alloy
Diameter: not over 76 in., not under 76 in.
No cutoff permitted
Pitch setting at 30 in. station: low 13.0° ±0.1°, high 27.0° to 31.0°
(Model C24R only, MC-449, MC-452 and on)
Caution: Avoid continuous operation between 2100 to 2350 rpm
(Model C24R only)

* Airspeed limits

Never exceed	193 m.p.h. (168 knots)
Maximum structural cruising	165 m.p.h. (144 knots)
Maneuvering	144 m.p.h. (125 knots)
Flaps extended	110 m.p.h. (95 knots)

C.G. range

Normal category:
(+113.0) to (+118.3) at 2750 lb.
(+110.0) to (+118.3) at 2375 lb. or less
Straight line variation between points given



Empty weight C.G. range — None

Leveling means — Baggage compartment floor

IX. Model B24R, Model C24R (cont'd)

Maximum weights: 2750 lb. (Normal Category)

No. of seats: 6 maximum (2 at +110, 2 at +147, 2 at +175))

Maximum baggage: 270 lb. (+167.0)

Fuel capacity:

	Tank	Capacity Gal.	Usable Gal.	Arm
	L&R main	29.9 ea.	29.4 ea.	+117.0

See NOTE 1 for data on unusable fuel

OR

	Tank	Capacity Gal.	Usable Gal.	Arm
	L&R main	29.9 ea.	26.1 ea.	+117.0

See NOTE 1(d) for data on unusable fuel when S.I. No. 0624-281 has been complied with.

OR

	Tank	Capacity Gal.	Usable Gal.	Arm
	L&R main	29.9 ea.	28.6 ea.	+117.0

See NOTE 1(e) for data on unusable fuel (Model C24R)

Oil Capacity: 8 qt. (+50)
See NOTE 1 for unusable oil

Control surface movements:

Wing flaps	Down	35°	±1°		
Aileron	Down	10°	±2°	Up	20° ±2°
Rudder	Right	25°	±2°	Left	25° ±2°
Stabilizer	Down	2°	+2°, -1°	Up	15° ±2°

Serial Nos. eligible: MC-152 through MC-448, MC-450, MC-451 - Model B24R
MC-449, MC-452 and on - Model C24R

Data Pertinent to all Models

Datum: 103 in. forward of wing leading edge

Certification basis: Part 3 of the Civil Air Regulations effective May 15, 1956, as amended by 3-1 through 3-5 and 3.705 of amendment 3-7, amendment 3- 8, and 23.959 amendment 23-7.

Application for Type Certificate dated May 26, 1961.
Type Certificate No. A1CE issued February 20, 1962, obtained by the manufacturer under delegation option procedures.

Model B24R:
Part 3 of the Civil Air Regulations effective May 15, 1956, as amended by 3-1 through 3-5 and 3.705 of amendment 3-7, amendment 3- 8, and 23.959 of amendment 23-7 and 23.3 of amendment 23-4 to FAR 23 dated February 1, 1965.

Model C24R:
Part 3 of the Civil Air Regulations effective May 15, 1956, as amended by 3-1 through 3-5 and 3.705 of amendment 3-7, amendment 3- 8, and 23.959 of amendment 23-7 and 23.3 of amendment 23-4 to FAR 23 dated February 1, 1965, and FAR 36 effective June 1974, amendments 36-1 through 36-10 (S/N MC-449, MC-452 and On).

Data Pertinent to all Models (cont'd)

Model C23:
Part 3 of the Civil Air Regulations effective May 15, 1956, as amended by 3-1 through 3-5 and 3.705 of amendment 3-7, amendment 3- 8, and 23.959 of amendment 23-7 to FAR 23 dated February 1, 1965, and FAR 36 effective June 1974, amendments 36-1 through 36-10 (S/N M-1285 and On).

Production basis: Production Certificate No. 8. Delegation Option Manufacturer No. CE-2 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.

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

1. Stall Warning Indicator, Beech Dwg. 169-360015.
2. Pilot's Operating Handbook:
   (a) Model C24R Pilot's Operating Handbook dated June 1977 or later (S/N MC-449, MC-452 through MC-536 except MC-533); or items listed in NOTE 2.
   (b) Model C24R Pilot's Operating Handbook dated June 1977 or later (S/N MC-533, MC-537 and on).
   (c) Model C23 Pilot's Operating Handbook dated February 1979 or later (S/N M-1285 through M-2150 except M-2086); or items listed in NOTE 2.
   (d) Model C23 Pilot's Operating Handbook dated February 1979 or later (S/N M- 2086, M-2151 and on).

NOTE 1.
(a) Current weight and balance data together with list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.
(b) The certificated empty weight and the corresponding center of gravity locations must include unusable oil of 3 lb. at +45 (Model 23, A23-19, 19A, B23, M19A, B19 and C23); 3 lb. at +48 (Model A23 and A23A); 3 lb. at +50 (Model A23-24, A24R and A24); and unusable fuel of 6 lb. at +125.
(c) The certificated empty weight and the corresponding center of gravity locations must include unusable oil of 3 lb. at +50 and unusable fuel of 45.6 lb. at +125 (Model B24R).
(d) The certificated empty weight and the corresponding center of gravity locations must include unusable oil of 3 lb. at +45 (Model 23, A23-19, 19A, B23, M19A, B19 and C23); 3 lb. at +48 (Model A23 and A23A); 3 lb. at +50 (Model A23-24, A24R and A24); and unusable fuel of 45.6 lb. at +125 for those aircraft that comply with S.I. 0624-281 and for Serial Numbers MB-655 and on; and Serial Numbers M-1517 and on).
(e) The certificated empty weight and the corresponding center of gravity locations must include unusable oil of 3 lb. at +45 (B19 and C23); 3 lb. at +50 (C24R) and unusable fuel of 15.6 lb. at +125 for aircraft S/N's MB-814, MB-817 and up; M-1875, M-1880 and up; MC-449, MC-452 and up.

Data Pertinent to all Models (cont'd)

NOTE 2. The following placard must be displayed in full view of the pilot:

(a) "This airplane must be operated in compliance with the operating limitations stated in the form of placards, markings and manuals."

"Normal Category maximum design weight	2300 lb. (Model 23) 2350 lb. (Model A23) 2400 lb. (Model A23A) 2200 lb. (Model A23-19)"
"Normal Category maximum design weight	2550 lb. (Model A23-24, A24) 2250 lb. (Model 19A, M19A) 2150 lb. (Model B19, S/N MB-617 and on and MB-481 through MB-616 when modified per Beech kit 23-9014) 2000 lb. (Model B19, S/N MB-481 through MB-616) 2450 lb. (Model B23, C23) 2750 lb. (Model A24R, B24R, C24R)
Refer to weight and balance data for loading instructions.	
Flight maneuver load factor	Flap up +3.8, -1.9 Flap down +1.9
Maximum maneuver speed	132 mph (Model 23) 133 mph (Models A23, A23-19, 19A, M19A, B19) 135 mph (Models A23A, B23, C23) 140 mph (Models A23-24, A24) 144 mph (Models A24R, B24R, C24R)
No acrobatic maneuvers including spins approved."	
"Utility Category (Model 23)**	
Maximum weight	1960 lb.
Flight maneuver load factor	Flap up +4.4, -2.2 Flap down +2.2

No acrobatic maneuvers approved except those listed below:

Maneuver	Maximum entry speed
Chandelles	132 mph
Lazy eights	132 mph
Steep turns	132 mph
Stalls (except whip stalls)	Slow deceleration

Note: Maximum altitude loss during stalls 300 ft."

"Utility Category (Model 23 only)**	
Maximum weight	2000 lb.
Flight maneuver load factor	Flap up +4.4, -2.2 Flap down +2.2

Data Pertinent to all Models (cont'd)

No acrobatic maneuvers approved except those listed below:

Maneuver	Maximum entry speed
Chandelles	132 mph.
Lazy eights	132 mph.
Steep turns	132 mph.
Stalls (except whip stalls) Slow deceleration	

Note: Maximum altitude loss during stalls 300 ft."
Spins – For Operational Limitations (See NOTES 3 & 7)

**Note: Either placard listed for Model 23 eligible on all Model 23 aircraft at option of owner.

OR "Utility Category (Model A23, A23A, A23-19, 19A, B23, B19, C23)

Maximum weight 2030 lb. (2000 lb. Model B19 only; S/N MB-481 through MB-616 unless modified per kit 23-9014-1S)

Refer to weight and balance data for loading instructions.

Flight maneuver load factor Flap up +4.4, -2.2
Flap down +2.2

No acrobatic maneuvers approved except those listed below:

Maneuver	Maximum entry speed
Chandelles	133 mph.
Lazy eights	133 mph.
Steep turns	133 mph.
Stalls (except whip stalls) Slow deceleration	

Note: Maximum altitude loss during stalls 300 ft."
Spins (Models A23-19, 19A, B23, B19 S/N MB-481 through MB-654, C23 S/N M-1285 through M-1493). For operational limitations (See NOTE 3 & 7).

OR "Utility Category (Model A23-24, A24)

Maximum weight 2200 lb.
Refer to weight and balance data for loading instructions
Flight maneuver load factor Flap up +4.4, -2.2
Flap down +2.2

No acrobatic maneuvers approved except those listed below:

Maneuver	Maximum entry speed
Chandelles	140 mph.
Lazy eights	140 mph.
Steep turns	140 mph.
Stalls (except whip stalls) Slow deceleration	

Note: Maximum altitude loss during stalls 300 ft."

Data Pertinent to all Models (cont'd)

OR "Utility and Acrobatic category (Models 19A, M19A, B19)

Maximum weight	2030 lb. (2000 lb. Model B19 only; S/N MB-481 through MB-616 unless modified per kit 23-9014-1S)
Refer to weight and balance data for loading instructions	
Flight maneuver load factor	Flap up +6.0, -3.0 Flap down +2.0

No acrobatic maneuvers approved except those listed below:

Maneuver	Maximum entry speed
Chandelles	133 mph.
Lazy eights	133 mph.
Steep turns	133 mph.
Stalls (except whip stalls)	Slow deceleration
Note: Maximum altitude loss during stalls	300 ft."
Spins (for operational limitations see NOTES 3, 5 & 8)	

	Recommended entry speed
Barrel roll	130 mph
Aileron roll	130 mph.
Snap roll	100 mph.
Split S	90 mph.
Immelmann	150 mph.
Loop	140 mph."

or "Utility and Acrobatic category (Models B23 and C23)

Maximum weight	2030 lb.
Refer to weight and balance data for loading instructions	
Flight maneuver load factor	Flap up +6.0, -3.0 Flap down +2.0
Stalls (except whip stalls)	Slow deceleration
Note: Maximum alt. loss during stalls	300 ft.

No acrobatic maneuvers approved except those listed below:

Maneuver	Recommended entry speed
Chandelles	133 mph.
Lazy eights	133 mph.
Steep turns	133 mph.
Stalls (except whip stalls)	Slow deceleration
Spins (for operational limitations see NOTE 3 & 6)	
Barrel roll	130 mph
Aileron roll	130 mph.
Snap roll	100 mph.
Split S	90 mph.
Immelmann	150 mph.
Loop	140 mph."
Stalls (Except whip stalls)	Slow deceleration"

Data Pertinent to all Models (cont'd)

or "Utility Category (Model A24R)

Maximum weight		2375 lb.
Refer to weight and balance data for loading instructions		
Flight maneuver load factor		Flap up +4.4, -2.2
		Flap down +2.2

No acrobatic maneuvers approved except those listed below:

Maneuver	Maximum entry speed
Chandelles	144 mph.
Lazy eights	144 mph.
Steep turns	144 mph.
Stalls (except whip stalls) Slow deceleration	
Note: Maximum altitude loss during stalls	300 ft."

Landing gear

Maximum gear extended speed		155 mph.
Maximum gear operating speed,	Extension	155 mph.
	Retraction	130 mph.

(B24R, C24R) No acrobatic maneuver approved except those listed below:
Maneuver, bank angle no more than 60 Deg. (Model B24R, C24R)

Maneuver	Maximum entry speed
Chandelles	144 mph.
Lazy eights	144 mph.
Steep turns	144 mph.
Stalls (except whip stalls) Slow deceleration	
Note: Maximum altitude loss during stalls	300 ft."

Landing gear:

Maximum gear extended speed		155 m.p.h.
Maximum gear operating speed,	Extension	155 m.p.h.
	Retraction	130 m.p.h.

(b) On flap handle:
"Pull to extend - maximum speed 110 mph.
Model 23 - Retracted 0 Deg.
1st notch 15 Deg.
2nd notch 30 Deg.

Model A23, A23A, A23-19, A23-24, 19A, B23, M19A, A24, A24R, B19, C23, B24R, C24R
Retracted 0 Deg.
1st notch 15 Deg.
2nd notch 25 Deg.
3rd notch 35 Deg."

OR Adjacent to electric flap switch: "110 m.p.h. - maximum extension speed."

AND Below electric flap switch: (B24R, C24R): "Use 15 Deg. flaps for takeoff."

Data Pertinent to all Models (cont'd)

(c) On fuel selector:
Models 23, A23-19, a23-24, 19A, B23, M19A, A24, A24R, B19, C23
"L. Tank - 29 gallons. R. Tank - 29 gallons. OFF."
Models A23, A23A
"Use 15 gallons from left tank first."
"L. Tank - 29 gallons. R. Tank - 29 gallons. OFF."
Model B24R
"L. Tank - 26 gallons. R. Tank - 26 gallons. OFF."
Model B24R, 23, A23, A23A, A23-19, 19A, B19, M19A, A23-24, B23, C23, A24, A24R,
if S.I. 0624-281 is complied with and C23 S/N M-1517 through M-1879 except M-1875;
B19 S/N MB-655 through MB-816 except MB-814.
"L. Tank - 26 gallons, R. Tank - 26 gallons. OFF."
Model C24R
"L. Tank - 28.6 gallons, R. Tank - 28.6 gallons. OFF."
Model C23
"L. Tank - 28.6 gallons, R. Tank - 28.6 gallons. OFF."
(S/N M-1875, M-1880 and up)
Model B19
"L. Tank - 28.6 gallons, R. Tank - 28.6 gallons. OFF."
(S/N MB-814, MB-817 and on)

(d) In baggage compartment:
(Maximum baggage - 140 lb." (23, A23)
(Maximum baggage - 340 lb." (A23-19, 19A, M19A, B19)
(Maximum baggage - 270 lb." (A23-24, A23A, B23, A24R, A24, C23, B24R)
"Baggage Compartment 270 Pounds Maximum Capacity." (C24R)

(e) Adjacent to fuel filler cap:

"CAUTION: Use 91/96 octane fuel or higher only. (23, A23, A23A, B23, C23).
Maximum capacity - 29 U.S. gallons. Usable fuel 26 U.S. gallons." (If S.I. 0624-281 is complied with, and S/N M-1517 through M-1879, except M-1875.)

"CAUTION: Use 80/87 octane fuel or higher only. (A23-19, 19A, M19A, B19)
Maximum capacity - 29 U.S. gallons. Usable fuel 26 U.S. gallons." (If S.I. 0624-281 is complied with, and S/N MB-655 through MB-816, except MB-814.)

"CAUTION: Use 100/130 octane fuel or higher only. (A23-24, A24R, A24)
Maximum capacity - 29 U.S. gallons. Usable fuel 26 U.S. gallons." (If S.I. 0624-281 is complied with.)

"CAUTION: Use 100/130 octane fuel or higher only. (B24R)
Maximum capacity - 29 U.S. gallons. Usable fuel 26 U.S. gallons."

"CAUTION: Use 80/87 octane fuel or higher only. (B19)
Maximum capacity - 29 U.S. gallons. Usable fuel 28.6 U.S. gallons."
(S/N MB-814, MB-817 and on)

"CAUTION: Use 91/96 octane fuel or higher only. (C23)
Maximum capacity - 29 U.S. gallons. Usable fuel 28.6 U.S. gallons."
(S/N M-1875, M-1880 and on)

Data Pertinent to all Models (cont'd)

"CAUTION: Use 100/130 octane fuel or higher only. (C24R)
Maximum capacity - 29 U.S. gallons. Usable fuel 28.6 U.S. gallons."
(S/N MC-449, MC-452 and on)

(f) On baggage door (Model A23-24, A24R and A24)
"Maximum fifth and sixth seat structural capacity 250 lb. Refer to weight and balance for loading instructions."

On R.H. sidewall below third side window: (Model B24R, C24R)
"Maximum fifth and sixth seat structural capacity 250 lb. Refer to weight and balance for loading instructions.

No smoking in fifth and sixth seats."

On baggage door, adjacent to latch on the interior: OPEN (B24R, MC-151 through MC-180)

OPEN

On baggage door, adjacent to latch on the interior: OPEN  (B24R, MC-181 through MC-426)

Pull pin. Rotate handle to Open  (B24R, C24R: MC-427 and on)

Emergency Exit

"(1) Normal operation - handle up or down to open.
(2) In the event of door jamming, it may be opened by means of a hard kick to the center section of the door."

On seat back (fifth and sixth seats): "Maximum occupant weight 250 lb."

(g) On right hand cabin door:
Models 19A, M19A, B23, C23, B19 (Acrobatic Category)
"Emergency exit."
"Turn handle counterclockwise and kick out to jettison door."

(h) On the instrument panel:
Model 19A, M19A, B23, C23, B19 (Acrobatic Category)
"CAUTION: Continuous inverted flight will cause loss of oil and oil pressure.
Rear C.G. limited. Carrying of baggage or rear seat passengers and use of flaps prohibited during acrobatic maneuvers."

Model M19A: "No Smoking."

Model B24R, C23, B19:
"Raise flaps to increase brake effectiveness."
"In case of fire in engine compartment close defrost and cabin air valve."
"Do not take off when fuel quantity gauges indicate in yellow band or with less than 11 gallons in each main tank. Maximum slip duration is 30 seconds." (Model C23, S/N M-1517 through M-1879 except M-1875; Model B19, S/N MB-655 through MB-816 except MB-814.)

Data Pertinent to all Models (cont'd)

Model C24R, C23, B19:
"Raise flaps to increase brake effectiveness."
"In case of fire in engine compartment close defrost and cabin air valve."
"Do not take off when fuel quantity gauges indicate in yellow on either gauge. Maximum slip duration is 30 seconds." (Model MC-449, MC-452 and after, M-1875, M-1880 and after; MB-814, MB-817 and after.)

Models 23, A23, A23A, A23-19, 19A, B19, M19A, A23-24, B23, C23, A24, A24R if S.I. 0624-281 is complied with:

"Do not take off when fuel quantity gauges indicate in yellow band or with less than 11 gallons in each main tank. Maximum slip duration is 30 seconds."

(i) On floor under pilot's feet:
Models A24R/B24R/C24R
"Emergency gear extension access door."

(j) On the floor adjacent to landing gear emergency extension valve:
Models A24R (S/N MC-2 through MC-95) and B24R (S/N MC-151 and on)
"EMERGENCY LANDING GEAR EXTENSION"
"1. Landing gear motor circuit breaker - OFF (PULL)
2. Gear position switch - down
3. Throttle - closed
4. Indicated air speed - 100 mph.
5. Emergency extension valve - open
(Use handle - turn counter-clockwise)
6. Wait at least 10 seconds before advancing throttle."

Model A24R (S/N MC-96 and on, including aircraft MC-2 through MC-95, which incorporate Beech Aircraft Kit 23-8005 "Kit Information Cylinder Installation, Nose Gear"), B24R (S/N MC-151 through MC-448, MC-450 and MC-451) and C24R (S/N MC-449, MC- 452 and on):
"EMERGENCY LANDING GEAR EXTENSION"
"1. Landing gear motor circuit breaker - OFF (PULL)
2. Gear position switch - down
3. Throttle - maximum 12 inches of mercury (Manifold pressure)
4. Indicated air speed - 100 mph.
5. Emergency extension valve - open
(Use handle - turn counter-clockwise)

(k) On the left hand side panel adjacent to the emergency extension handle (Model A24R, B24R, C24R)
"Emergency gear extension handle."

(l) On the right hand side just aft of the top corner of the cabin door:
Model A24R, A24, B19, C23
1. On the interior: "Open"
2. On the exterior: "Open"

→

(m) On right and left hand cabin door Model A24R, C23, B19, B24R (those aircraft fitted with bandoleer type shoulder harness);
"1. Occupants shorter than 4 ft. 7 in. do not use shoulder strap.
2. Never use shoulder strap without lap belts."

Data Pertinent to all Models (cont'd)

(n) On right hand cabin door Model C23, B19 (Acrobatic Category)
(For those aircraft fitted with remote control latches):
"Emergency exit. Turn handle counter-clockwise and pull latch above arm rest, then kick out to jettison door."

(o) On left hand cabin door Model C23, B19 (Acrobatic Category)
(For those aircraft fitted with remote control latches):
"Emergency exit. Turn handle clockwise and pull latch above arm rest, then kick out to jettison door."

(p) On right hand side wall below second side window (Model B19, C23)
"Baggage, cargo or family seats.
Load in accordance with weight and balance data.
Maximum seat capacity _____ pounds."

(q) On right hand side wall below third side window (Model B24R, C24R)
"Baggage, cargo or family seats.
Load in accordance with weight and balance data.
Maximum seat capacity _____ pounds."

Note: Placards defined in Note 2, (p) and (q) will be installed as necessary to show compliance with CAR 3.74.

(r) On the right and left upper window frames above the first and second side windows (Models B19, C23, B24R, C24R). (For those aircraft equipped with single point shoulder harness and lap belt)

"Instruction - Shoulder strap
1. Occupant shorter than 4 ft. 7 in. do not use shoulder strap."
2. Place seat back in the upright position during takeoff and landing."

(s) On the right and left upper window frames above the third side window (Model B24R, C24R).
(For those aircraft equipped with sixth seat installation and with single point shoulder harness and lap belt)

"Instruction - Shoulder strap
1. Occupant shorter than 4 ft. 7 in. do not use shoulder strap."

NOTE 3. Operational Limitations

Spins: The airplane will not spin if orthodox entry is used, but will enter a spiral dive. Speed builds up rapidly in a spiral dive, requiring high pullout loads; therefore, if a spiral is inadvertently entered recovery from the spiral is to be initiated within two turns.

Entry: Stall the airplane with the control column hard back, power off, flaps up, carburetor heat as required and with the nose about 15° above the horizon. At the stall, apply full rudder in the direction required to spin. A slight rudder application immediately before the stall will assure the direction of spin. The airplane nose will drop and rotate towards the applied rudder. When the wings are 90° to the horizon, apply full aileron against (i.e. against the intended direction of spin). The airplane will go slightly inverted and enter a normal spin.

Data Pertinent to all Models (cont'd)

If aileron against is not applied or applied too late, the airplane will enter a rapid spiral dive, and recovery must be initiated by the second turn. If the full back stick is not applied and held, the airplane may spiral. Again recovery must be initiated not later than the second turn.

If aileron is applied too early, the airplane will not rotate and merely remain in a straight stalled condition.

Recovery: "THE AIRPLANE WILL RECOVER FROM ANY SPIN WHEN POSITIVE CORRECTIVE ACTION IS TAKEN; SIMULTANEOUSLY REVERSE RUDDER AND ELEVATOR WITH AILERON NEUTRAL. ALL CONTROLS SHOULD BE NEUTRALIZED AS ROTATION STOPS."

Operational Limitations: (Model C23, M-1629 - Model B19, MB-747 and on)

Spins: The airplane will not spin if orthodox entry is used, but will enter a spiral dive. Speed builds up rapidly in a spiral dive, requiring high pullout loads; therefore, if a spiral is inadvertently entered, recovery from the spiral is to be initiated within two turns.

Entry: Stall the airplane with the control column hard back, throttle in idle position, flaps up, carburetor heat as required and with the nose about 15° above the horizon. At the stall, apply full rudder in the direction required to spin. A slight rudder application immediately before the stall will assure the direction of spin. The airplane nose will drop and rotate towards the applied rudder. When the wings are 90° to the horizon, apply full aileron against (i.e. against the intended direction of spin). The airplane will go slightly inverted and enter a normal spin.

If aileron against is not applied or applied too late, the airplane will enter a raid spiral dive, and recovery must be initiated by the second turn.

If the full back stick is not applied and held, the airplane may spiral. Again, recovery must be initiated not later than the second turn.

If aileron is applied too early, the airplane will not rotate and merely remain in a straight stalled condition.

Recovery: "IMMEDIATELY MOVE THE CONTROL COLUMN FULL FORWARD AND SIMULTANEOUSLY APPLY FULL RUDDER OPPOSITE TO THE DIRECTION OF THE SPIN: CONTINUE TO HOLD THIS CONTROL POSITION UNTIL ROTATION STOPS AND THEN NEUTRALIZE ALL CONTROLS AND EXECUTE A SMOOTH PULLOUT. AILERONS SHOULD BE NEUTRAL AND THROTTLE IN IDLE POSITION AT ALL TIMES DURING RECOVERY."

NOTE 4. Model B23 aircraft may be operated as a 2 PCLM in the Acrobatic Category for those maneuvers listed in NOTE 2(a) when the equipment required by NOTE 1 is installed per Beech Modification Contact Order C55218. In addition, for Serial Numbers M-1136 through M-1284, install Beech Kit 23-4007-1S per AD 74-23-09.

NOTE 5. Model B19 aircraft may be operated as a 2 PCLM in the Acrobatic Category for those maneuvers listed in NOTE 2(a) when the equipment required by NOTE 1 is installed per Beech Dwg. 169-002000. In addition for S/N MB-481 through MB-634 and MB-649 install Beech Kit 23-4007-1S per AD 73-14-8.

NOTE 6. Model C23 aircraft may be operated as a 2 PCLM in the Acrobatic Category for those maneuvers listed in NOTE 2(a) when the equipment required by NOTE 1 is installed per Beech DWG. 169-002001. In addition for Serial Numbers M-1285 through M-1493, except M-1437 AND M-1491, install Beech Kit 23-4007-1S per AD 73-14-08.

Data Pertinent to all Models (cont'd)

NOTE 7. Models 23, A23-19 and B23 aircraft may be operated as a 2 PCLM in the Utility Category for those maneuvers listed in NOTE 2(a) when the equipment required by Beech Kit 23-4007-5S or 23-4007-1S is installed per AD 74-23-09.

NOTE 8. Models 19A, M19A, S/N MB-289 through MB-480, may be operated as a 2 PCLM in the Acrobatic Category for those maneuvers listed in NOTE 2(a) when the equipment required by NOTE 1 is installed per Beech Dwg. 169-002000 and Beech Kit 23-4007-1S is installed per AD 74-23-09.

NOTE 9. Model M19A, S/N MB-461 through MB-480, must be reworked in accordance with Mod. C.O. #E32136 prior to U.S. Registration.

In addition to the placards specified above, the prescribed operating limitations indicated by an asterisk (*) under Sections I through IX of this data sheet must be displayed by permanent markings.

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