

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

A16SW  
Revision 29  
Textron Aviation  
MU-300-10  
400  
400A  
400T  
  
October 12, 2016

**TYPE CERTIFICATE DATA SHEET NO. A16SW**

This data sheet which is part of Type Certificate No. A16SW 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, Kansas 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 MU-300-10, Diamond II, (Transport Category), Approved April 30, 1985 (See NOTES 5 & 6)**  
**Model 400, Beechjet, (Transport Category), Approved April 1, 1986 (See NOTE 7)**

Engines                               2 Pratt & Whitney Canada JT15D-5 turbofans

Fuel                                   Commercial kerosene Jet A, Jet A-1, Jet B, or JP-4.  
JP-5 and JP-8 if aircraft complies with SB 2378.

Fuel not containing icing inhibitors must have MIL-I-27686D or MIL-I-85470A fuel system icing inhibitor added in amounts of not less than 0.10% or more than 0.15% by volume. See Airplane Flight Manual for blending anti-icing additive to fuel.

Temperature:  
Minimum   -40° C.  
Maximum   50° C.

Page No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Rev. No.	29	9	9	21	24	16	21	26	27	28	18	18	18	28

**I. Model MU-300-10, Model 400** (cont'd)

## Engine Limits

Static thrust standard day, sea level:

Takeoff (5 min.) 2,900 lb.

Max. continuous 2,900 lb.

Max. permissible engine rotor operating speeds:

N<sub>1</sub> (Fan) 104%

16,540 r.p.m.

N<sub>2</sub> (Gas Gen.) 96%

31,450 r.p.m.

Max. permissible interturbine gas temperatures:

Takeoff 700° C.

Max. continuous 680° C.

Starting Transient (2 sec.) 700° C.

## Airspeed Limits (IAS)

V<sub>MO</sub> (Maximum Operating Speed)S/N's A1001S.A. - A1011S.A. and RJ-12 through RJ-15

264 knots Sea level to 14,000 ft.

320 knots 17,000 ft. to 26,000 ft.

Note: Linear variation from 264 KTS @ 14,000 ft.  
to 320 KTS @ 17,000 ft.S/N's RJ-16 through RJ-65 or Kit 400-5003 installed

264 knots Sea level to 8,000 ft.

320 knots 11,000 ft. to 26,000 ft.

Note: Linear variation from 264 KTS @ 8,000 ft.  
to 320 KTS @ 11,000 ft.M<sub>MO</sub> = 0.785 MACH above 26,000 ft.V<sub>A</sub> (Maneuvering Speed)

205 Knots Sea level to 20,000 ft.

230 Knots At 41,000 ft.

Note: Linear variation from 20,000 ft. to 41,000 ft.

V<sub>FE</sub> (Flaps extended)

165 Knots Flaps 30°

200 Knots Flaps 10°

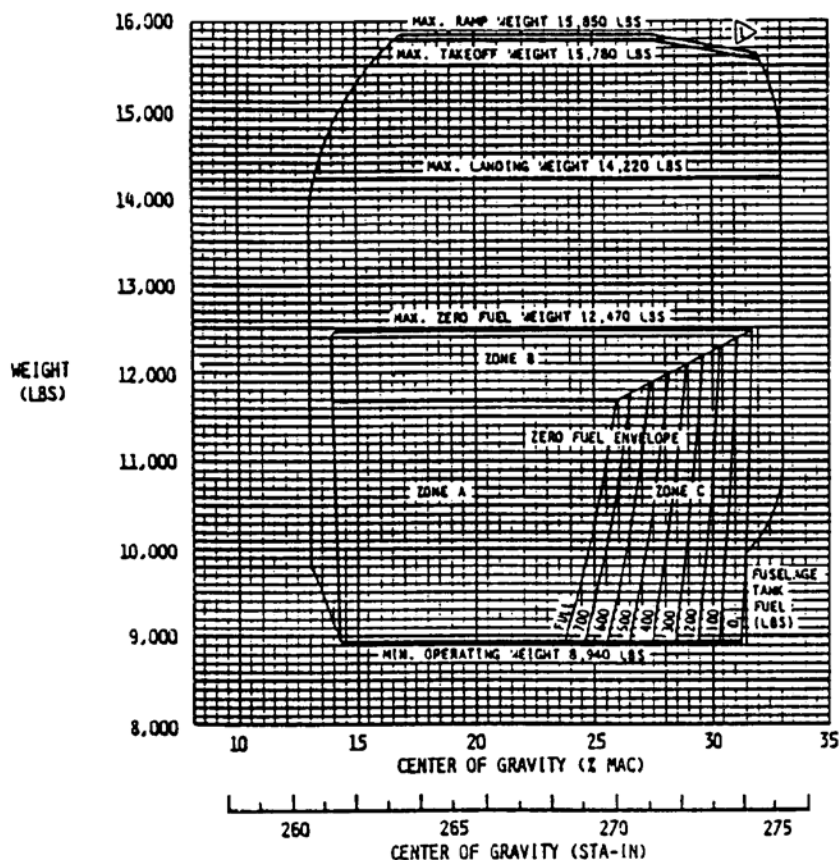
V<sub>MCA</sub> (Min. Control Speed Air) = 90 KnotsV<sub>MCG</sub> (Min. Control Speed Ground) = 93 KnotsV<sub>LO</sub> (Landing Gear Operating) = 200 KnotsV<sub>LE</sub> (Landing Gear Extended) = 200 Knots

**I. Model MU-300-10, Model 400** (cont'd)

C.G. Range (Landing  
Gear Extended)

**CENTER OF GRAVITY FLIGHT ENVELOPE**

- ZONE A Loading and combination of fuel in wing or fuselage tanks, loading at least 900 pounds in each main fuel tank.
- ZONE B The difference between ZFW and 12,470 pounds may be loaded as fuel in the fuselage tank provided at least 900 pounds of fuel are placed in each main fuel tank.
- ZONE C Fuselage tank fuel loading is limited to the value shown on the guideline appropriate to ZFW location. Load at least 900 pounds of fuel in each main fuel tank.

**WEIGHT AND CENTER OF GRAVITY ENVELOPE  
FLIGHT/ZERO FUEL**

Wheel Loading Limit Line - Reduce Maximum Ramp Weight (15,850 lbs.) by 50 Lbs. of wing fuel for each percentage of MAC aft of 27.5%.

Empty Wt. C.G. Range

None

Maximum Weight

Takeoff	15,780 lb.
Landing	14,220 lb.
Zero fuel	12,470 lb.
Ramp	15,850 lb.

Minimum Crew

For all flights: 2 persons (pilot and copilot)

Number of Seats

11 (2 pilots and 9 passengers). See NOTE 4

Maximum Baggage

Aft cabin	400 lb. (at +313.4)
	400 lb. (at +286.5)

**I. Model MU-300-10, Model 400** (cont'd)

Fuel Capacity (Gal.)		<u>Total</u>	<u>Usable</u>	<u>Arm</u>
	Two wing tanks:	265.6 ea.	259.3 ea.	+272.8
	One aft fuselage tank:	121.6	117.2	+337.8
	See NOTE 1 for data on unusable fuel			

Oil Capacity (Gal.)	Two engine mounted tanks:
	Total 2.03 each; usable 1.20 each; ARM = +342.2
	See NOTE 1 for data on undrainable oil

Maximum Operating Altitude	41,000 ft.
----------------------------	------------

Control Surface Movements	Spoiler inboard	Up	68°	Down	14°
	Spoiler outboard	Up	72°	Down	14°
	Lateral trim	Up	25°	Down	25°
	Elevator	Up	25°	Down	12°
	*Pitch	L.E. Up	123.8	L.E. Down	12.8
	Rudder	Right	30°	Left	30°
	Rudder trim	Right	30°	Left	30°
	Flap	Full	30°		
	Speed brake		36°		
	Yaw damper	Right	26.6°	Left	27.6°

See Drawing 45A00601 or maintenance manual for rigging tolerance

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

See drawing for details.

Serial Nos. Eligible	A1001S.A. through A1011S.A. (MU-300-10), RJ-12 through RJ-50, RJ-52 through RJ-65 (400). See NOTE 6
----------------------	---

**Data Pertinent to Models MU-300-10 and 400**

Datum	Located 71.65 in. forward of the front face of the forward pressure bulkhead.
-------	---

MAC	73.11 in. (L.E. of MAC at +251.09)
-----	------------------------------------

Leveling Means	Seat rails
----------------	------------

Certification Basis	Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by 25-1 through 25-40, plus FAR 25.1351(d), 25.1353(c)(5), and 25.1450 of Amendment 25-41; FAR 25.29, FAR 25.255, and FAR 25.1353(c)(6) of Amendment 25-42; and FAR 25.361(b) of Amendment 25-46. Part 36 of the Federal Aviation Regulations effective December 1, 1969, as amended by 36-1 through 36-12 (See NOTE 8).
---------------------	---

**Equivalent Safety Items**

- (1) Out-of-trim characteristics FAR 25.255
- (2) Pilot compartment view FAR 25.773(b)(2)
- (3) RJ-39 and after, passenger compartment door FAR 25.813(e)

Application for Type Certificate dated February 28, 1984.

Type Certificate No. A14SW was issued November 6, 1981, for the MU-300 and was amended April 30, 1985, to add the MU-300-10. The MU-300-10 was removed from A14SW and made part of Type Certificate No. A16SW on April 1, 1986. Type Certificate No. A16SW was amended April 1, 1986, to add the 400.

Production Basis	PC-8, RJ-16 through RJ-65; Serial Nos. A1001S.A. through A1011S.A. and RJ-12 through RJ-15, an FAA representative performed detailed inspection for workmanship, materials, conformity with approved technical data, and a check of flight characteristics. See NOTE 6.
------------------	---

**Data Pertinent to Models MU-300-10 and 400** (cont'd)

Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.
NOTE 1.	Current weight and balance report including list of equipment included in certificated empty weight and loading instructions when necessary must be provided for each aircraft at the time of original certification.
	The certificated empty weight and corresponding center of gravity location must include:
	Unusable fuel (two wing tanks) 89.1 lb. at +255.9
	Unusable fuel (one aft fus. tank) 29.6 lb. at +338.8
	Undrainable oil (two engine) 2.4 lb. at +342.2
	Hydraulic fluid 8.3 lb. at +349.6
NOTE 2.	The aircraft must be operated according to FAA Approved Airplane Flight Manual, Beech Part Number 128-590001-13, Rev. A3, dated June 4, 1987, or later.
NOTE 3.	Airworthiness Limitations containing overhaul times, replacement times, and special inspections required for continued airworthiness are listed in the following manuals: Maintenance Manual Part Number 128-590001-9, Chapter 4, and Structural Repair Manual Part Number 128-590001-17.
NOTE 4.	The toilet seat is certified as a side-facing seat approved for takeoff, flight, and landing.
NOTE 5.	Model MU-300-10 removed from Type Certificate No. A14SW and made part of Type Certificate No. A16SW on April 1, 1986.
NOTE 6.	Model MU-300-10 with serial numbers A1001S.A. through A1011S.A. were manufactured by Mitsubishi Aircraft International, Inc., under FAA Type Certificate No. A14SW and FAA Production Certificate No. 4SW.
NOTE 7.	Model MU-300-10 can be converted into Model 400 per Beech Service Bulletin Number 2140.
NOTE 8.	FAR 25.1335 of Amendment 25-41, 25.1329(h) of Amendment 25-46, and Special Conditions No. 25-ANM-33 also apply to the Model 400 when Collins Proline 4 Avionics with EFIS (PFD) and FCS APS-850 equipment is installed in accordance with Beech Aircraft Corporation ECR 204 and ECR 208.
NOTE 9.	Model MU-300-10 serial numbers A1001SA through A1011SA have been converted to Model 400 serial Numbers RJ-1 through RJ-11 respectively (See Note 7). MU-300-10 is no longer an active model. Service Data will not include Model MU-300-10.

## II. Model 400A, Beechjet (Hawker 400XP), (Transport Category), Approved June 20, 1990

Engines	2 Pratt & Whitney Canada JT15D-5 turbofans (RK-1 through RK-507) 2 Pratt & Whitney Canada JT15D-5R turbofans (RK-508 and On)
Fuel	JT15D-5 Commercial kerosene Jet A, Jet A-1, Jet B, JP-4, JP-5, JP-8, JP-8+100, or RP-3 JT15D-5R Commercial Kerosene Jet A, Jet A-1, JP-5, JP-8, JP-8+100, or RP-3 (Jet B and JP-4 not approved.) See NOTE 13.  Fuel not containing icing inhibitors must have MIL-I-27686D or MIL-I-85470A fuel system icing inhibitor added in amounts of not less than 0.10% or more than 0.15% by volume. See Airplane Flight Manual for blending anti-icing additive to fuel.  Temperature: Minimum            -40° C. Maximum          50° C.
Engine Limits	Static thrust standard day, sea level: Takeoff (5 min.)      2,900 lb. (RK-1 thru RK-92) (See note 6)  Takeoff (5 min.)      2,965 lb. (RK-93 & after) Max. continuous      2,900 lb. Max. permissible engine rotor operating speeds: N <sub>1</sub> (Fan)              104% 16,540 r.p.m. N <sub>2</sub> (Gas Gen.)        96% 31,450 r.p.m.  Max. permissible interturbine gas temperatures: Takeoff                700° C. Max. continuous      680° C. Starting Transient (2 sec.) 700° C.
Airspeed Limits (IAS)	V <sub>MO</sub> (Maximum Operating Speed) 264 knots Sea level to 8,000 ft. 320 knots 11,000 ft. to 26,000 ft. Note: Linear variation from 264 KTS @ 8,000 ft. to 320 KTS @ 11,000 ft.  M <sub>MO</sub> = 0.78 MACH above 26,000 ft.  V <sub>A</sub> (Maneuvering Speed) 210 Knots At Sea Level 213 Knots At 20,000 ft. Note: Linear variation between sea level and 20,000 ft. 246 Knots At 38,000 ft. Note: Linear variation between 20,000 ft. and 38,000 ft. 0.78 MACH From 38,000 ft. to 45,000 ft.  V <sub>FE</sub> (Flaps Extended) 165 knots Flaps 30° 200 knots Flaps 20° (RK-1 thru RK-92) (see note 6) 200 knots Flaps 20°: (RK-93 & after) 200 knots Flaps 10°

## II. Model 400A (cont'd)

Airspeed Limits (IAS) (cont'd)  $V_{MCA}$  (Min. Control Speed Air) = 89 Knots

$V_{MCG}$  (Min. Control Speed Ground)

When equipped with Collins Proline IV Avionics with three- or four-tube EFIS (PFD): 88 Knots

When equipped with Collins Proline IV Avionics with two-tube EFIS display: 92 Knots

$V_{LO}$  (Landing Gear Operating) = 200 Knots

$V_{LE}$  (Landing Gear Extended) = 200 Knot

C.G. Range (Landing Gear Extended)

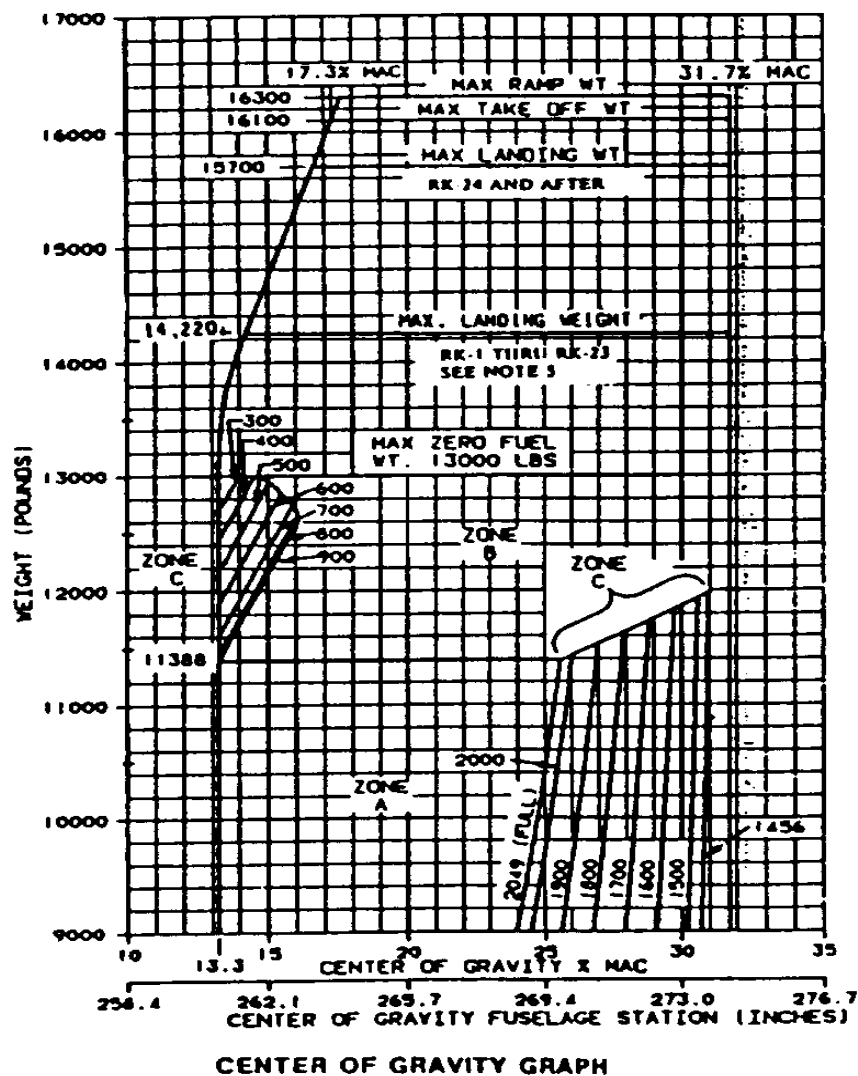
### CENTER OF GRAVITY FLIGHT ENVELOPE

Fuselage fuel is restricted as specified for Zones A, B, and C with full wing fuel:

ZONE A Any amount of fuselage fuel up to full tanks.

ZONE B The difference between ZFW and 13,437 pounds may be loaded in fuselage tanks.

ZONE C Fuselage tanks limited to the value shown on the guideline appropriate ZFW location.



**II. Model 400A** (cont'd)

Empty Wt. C.G. Range	None				
Maximum Weight	Takeoff	16,100 lb.			
		16,300 lb. (See NOTE 11)			
	Landing	14,220 lb. - RK-1 through RK-23 (See NOTE 5)			
	Landing	15,700 lb. - RK-24 and On			
	Zero fuel	13,000 lb.			
	Ramp	16,300 lb.			
		16,500 lb. - RK-1 through RK-346 (See NOTE 11) -RK-347 and On			
Minimum Crew	For all flights: 2 persons (pilot and co-pilot)				
Number of Seats	11 (2 pilots and 9 passengers). See NOTE 4				
Maximum Baggage	Aft cabin 350 lb. (at +309.0) (Opt.)				
	Fwd Cabin 150 lb. (at +152.0) (Opt.)				
	Fwd Cabin 100 lb. (at +156.0) (Std.) (W/Galley)				
Fuel Capacity (Gal.)		<u>Total</u>	<u>Usable</u>	<u>Arm</u>	
	Two wing tanks:	217.2 ea.	213.6 ea.	+276.6	
	Six fuselage tanks:	307.0	305.8	+296.1	
	See NOTE 1 for data on unusable fuel.				
Oil Capacity (Gal.)	Two engine mounted tanks:				
	JT15D-5, Total 2.03 each; usable 1.20 each; ARM = +342.2 in.				
	JT15D-5R, Total 2.17 each; usable 1.20 each; ARM = +344.81 in.				
	See NOTE 1 for data on undrainable oil.				
	See NOTE 13				
Maximum Operating Altitude	45,000 ft.				
Control Surface Movements	Spoiler inboard	Up	68°	Down 14°	
	Spoiler outboard	Up	72°	Down 14°	
	Lateral trim	Up	25°	Down 25°	
	Elevator	Up	25°	Down 12°	
	*Pitch	L.E. Up	123.8	L.E. Down 12.8	
	Rudder	Right	30°	Left 30°	
	Rudder trim	Right	30°	Left 30°	
	Flap	Full	30°		
	Speed brake		36°		
	Yaw damper/rudder roost		Function through primary rudder		
		See Drawing 45A00601 or maintenance manual for rigging tolerance.			
		*Length of the trim actuator jack screw in millimeters (mm)			
		See drawing for details.			
Serial Nos. Eligible	RK-1 and up SEE NOTE 10.				

**Data Pertinent to Model 400A**

Datum	Located 71.65 in. forward of the front face of the forward pressure bulkhead.
MAC	73.11 in. (L.E. of MAC at +251.09)
Leveling Means	Seat rails



**Data Pertinent to Model 400A** (cont'd)

**Certification Basis** Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by 25-1 through 25-40, plus FAR 25.1335, 25.1351(d), 25.1353(c)(5), and 25.1447 of Amendment 25-41; FAR 25.29, FAR 25.255, and FAR 25.1353(c)(6) of Amendment 25-42; and FAR 25.361(b) and 25.1329(h) of Amendment 25-46. Part 36 of the Federal Aviation Regulations effective December 1, 1969, as amended by 36-1 through 36-17; SFAR 27 effective February 1, 1974, as amended by 27-1 through 27-5; and Special Conditions No. 25-ANM-32 dated February 22, 1990 (High Altitude Operation at 45,000 feet), and Special Conditions No. 25-ANM-33 dated June 18, 1990 (Lightning and Radio Frequency Energy Protection). (See NOTE 12)

Equivalent Safety Items

- (1) Out-of-trim characteristics FAR 25.255
  - (2) Pilot compartment view FAR 25.773(b)(2)
  - (3) Passenger compartment door FAR 25.813(e)
  - (4) Emergency exit marking FAR 25.811(d)(1) and 25.811(d)(2)
- Application for amended Type Certificate dated February 18, 1988.

**Production Basis** PC-8, RK-1, RK-3, RK-6, RK-8, RK-9, RK-12 and On.  
TC only - RK-2, RK-4, RK-5, RK-7, RK-10, and RK-11; prior to standard airworthiness, aircraft must be inspected and flight tested by FAA.

**Equipment** The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

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

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

Unusable fuel (two wing tanks)	48.0 lb. at +277.8
Unusable fuel (six fus. tanks)	8.0 lb. at +319.7
Undrainable oil (two engines)	2.4 lb. at +342.2
Hydraulic fluid	8.3 lb. at +349.6

NOTE 2. The aircraft must be operated according to the following FAA Approved Airplane Flight Manuals:

- a. When equipped w/Electro-Mechanical Avionics and no autopilot: Beech Part Number 128-590001-75 dated June 20, 1990, or later.
- b. When equipped w/Collins Proline IV Avionics with two-tube EFIS display and APS-850 autopilot: RK-1 through RK-23: Beech Part Number 128-590001-91 dated November 20, 1990, or later.  
(See Note 7)  
RK-24 through RK-92: Beech Part Number 128-590001-107 dated October 16, 1991, or later.
- c. When equipped w/Collins Proline IV Avionics with three or four-tube EFIS (PFD) and APS-850 or APS-4000 autopilot: RK-1 through RK-23: Beech Part Number 128-590001-95 dated November 27, 1990, or later.  
(See Note 8)  
RK-24 through RK-92: Beech Part Number 128-590001-109 dated October 18, 1991, or later.  
(See Note 9)  
RK-93 and after: Beech Part Number 128-590001-167 dated July 13, 1994.

NOTE 3. Airworthiness Limitations containing overhaul times, replacement times, and special inspections required for continued airworthiness are listed in the following manuals:

Section 4 of Maintenance Manual, Part No. 128-590001-9 and Structural Repair Manual, Part No. 128-590001-17.

NOTE 4. The toilet seat is certified as a side-facing seat approved for takeoff, flight, and landing.

NOTE 5. If Beech Kit 128-8001-1 is installed, landing weight is at 15,700 lbs.

**Data Pertinent to Model 400A** (cont'd)

- NOTE 6. Static thrust standard day, sea level, for takeoff (5 min.) is 2,965 lb., and Flaps 20° is available for takeoff if the following conditions are met-  
RK-1 through RK-23: Beech Kits 128-8001-1 and 128-5025-3 must be installed.  
RK-24 through RK-44 and RK-46, RK-47, RK-48: Beech Kit 128-5025-3 must be installed.  
RK-45, RK-49 through RK-92: Beech Kit 128-5025-1 must be installed.
- NOTE 7. Beech Part Number 128-590001-107 dated October 11, 1991 or later if Beech Kit 128-8001-1 is installed.
- NOTE 8. Beech Part Number 128-590001-109 dated October 18, 1991, or later if Beech Kit 128-8001-1 is installed.  
Beech Part Number 128-590001-167 dated July 13, 1994, if Beech Kits 128-5025-3 and 128-8001-1 are both installed.
- NOTE 9. Beech Part Number 128-590001-167 dated July 13, 1994, if the following conditions are met-  
RK-24 through RK-44, and RK-46, RK-47, RK-48: Beech Kit 128-5025-3 must be installed  
RK-45, RK-49 through RK-92: Beech Kit 128-5025-1 must be installed Equipment
- NOTE 10. Company name change effective 4/15/96. The following serial numbers are manufactured under the name of Raytheon Aircraft Company: RK-98, RK-100 through RK-484, RK-486 through RK-511, and RK 514.
- NOTE 11. Kit 128-5202-0001, "Kit-Increased Gross Takeoff Weight, 200 Pound" may be installed on all Beechjet 400A aircraft. Configuration upgrades are required for earlier Serial Numbers with definition listed below:
- RK-1 to RK-23: requires kit 128-8001 "Kit-Increased Landing Weight Modification" and kit 128-5025-3 "Takeoff Performance Improvement" installation before kit 128-5052-0001 "Kit-Increased Gross Takeoff Weight, 200 Pound" may be installed.
- RK-24 to RK-92: requires kit 128-5025-1 or kit 128-5025-3 "Kit - Takeoff Performance Improvement" installation before kit 128-5052-0001 "Kit - Increased Gross Takeoff Weight, 200 Pound" may be installed.
- RK-93 THRU RK-346: 128-5052-0001 "Kit - Increased Gross Takeoff Weight, 200 Pound" may be installed without any other aircraft modification.
- RK-347 & After: The increased Gross Takeoff Weight, 200 Pound is installed in production.
- NOTE 12. Airplane model 400A is the subject of Special Condition related to operation at high altitude. This special condition includes pressurization system requirements, as well as damage tolerance requirements on the pressure vessel. Therefore, any changes to the pressurization system or modifications or repairs to the pressure vessel must be approved in accordance with the requirements defined in the special condition.
- The damage tolerance requirements in the special condition are specified in terms of cabin altitude time history, which is a function of the cabin leak rate. For model 400A the specified cabin altitude time history requirement can be met with a pressure vessel opening of 1.0 square inches (assuming an emergency descent). The determination of an equivalent crack length will depend upon the particular location of the crack, the pressure vessel configuration in that location, and the direction of the crack, etc. The approval of modifications and/or repairs must take into account the requirements of the special condition and how they apply to the particular location and configuration being modified or repaired. The resulting inspection program must also consider other applicable structural criteria.
- NOTE 13. RK-106 through RK-507 may install JT15D-5R by installation of RAC Kit 128-9008-1.
- NOTE 14. Company name change effective 3-26-07. The following serial numbers are manufactured under the name of Hawker Beechcraft Corporation: RK-485, RK-512, RK-513 and RK-515 through RK-604.

### III. Model 400T (T-1A), (TX) Beechjet, (Transport Category), Approved November 27, 1991

Engines 2 Pratt & Whitney Canada JT15D-5B turbofans (TT-1 and up)  
2 Pratt & Whitney Canada JT15D-5F turbofans (TX-1 and up)

Fuel Commercial kerosene Jet A, Jet A-1, Jet B, JP-4, JP-5, or JP-8.

Fuel not containing icing inhibitors must have MIL-I-27686D or MIL-I-85470A fuel system icing inhibitor added in amounts of not less than 0.10% or more than 0.15% by volume. See Airplane Flight Manual for blending anti-icing additive to fuel.

Temperature:

Minimum -40° C.

Maximum 50° C.

Engine Limits

Static thrust standard day, sea level:

Takeoff (5 min.) 2,900 lb.

Max. continuous 2,900 lb.

Max. permissible engine rotor operating speeds:

N<sub>1</sub> (Fan) 104%

16,540 r.p.m.

N<sub>2</sub> (Gas Gen.) 96%

31,450 r.p.m.

Max. permissible interturbine gas temperatures:

Takeoff 700° C.

Max. continuous 680° C.

Starting Transient (2 sec.) 700° C.

Airspeed Limits (IAS)

330 knots, Sea level to 24,800 ft.

V<sub>MO</sub> (Maximum Operating Speed)

M<sub>MO</sub> = 0.78 MACH above 24,800 ft.

V<sub>A</sub> (Maneuvering Speed)

210 Knots At Sea Level

213 Knots At 20,000 ft.

Note: Linear variation between sea level and 20,000 ft.

246 Knots At 38,000 ft.

Note: Linear variation between 20,000 ft. and 38,000 ft.

0.78 MACH From 38,000 ft. to 41,000 ft.

V<sub>FE</sub> (Flaps Extended)

165 Knots Flaps 30°

200 Knots Flaps 10°

V<sub>MCA</sub> (Min. Control Speed Air) = 89 Knots

V<sub>MCG</sub> (Min. Control Speed Ground) = 88 Knots

V<sub>LO</sub> (Landing Gear Operating) = 200 Knots

V<sub>LE</sub> (Landing Gear Extended) = 200 Knots

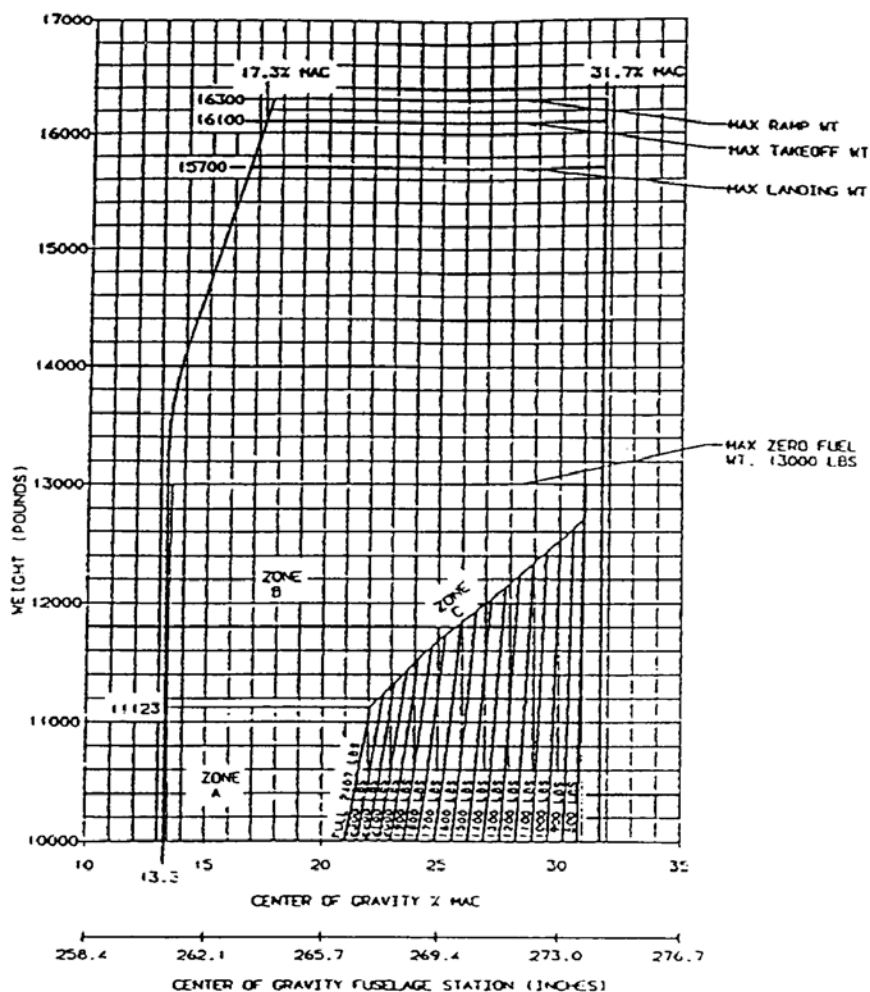
### III. Model 400T (cont'd)

C.G. Range (Landing  
Gear Extended)

#### CENTER OF GRAVITY FLIGHT ENVELOPE

Fuselage fuel is restricted as specified for Zones A, B, and C with full wing fuel:

- ZONE A Any amount of fuselage fuel up to full tanks.  
 ZONE B The difference between ZFW and 13,530 pounds may be loaded in fuselage tanks.  
 ZONE C Fuselage tanks limited to the value shown on the guideline appropriate ZFW location.



NOTE: Zones A, B and C Notation Applies to Model 400T(TX) Only.

Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 16,100 lb.  
 Landing 15,700 lb.  
 Zero fuel 13,000 lb.  
 Ramp 16,300 lb.

Minimum Crew

For all flights: 2 persons (pilot and co-pilot)

Number of Seats

2 (Crew) + 1 (Observer) (TT-1 and up)  
 2 (Crew) + 1 (Observer) + 4 (Passengers) (TX-1 and up)

**III. Model 400T** (cont'd)

Fuel Capacity (Gal.)		<u>Total</u>	<u>Usable</u>	<u>Arm</u>
Model 400T(T-1A)	Pressurized Fueling			
	Two wing tanks:	208 ea.	204.5 ea.	+276.5
	Four fuselage tanks:	363	362	+304.4
	Gravity Fueling			
	Two wing tanks:	215 ea.	211.5 ea.	+276.5
	Four fuselage tanks:	317	316	+303.4
	See NOTE 1 for data on unusable fuel.			
Model 400T(TX)	Pressurized Fueling			
	Two wing tanks:	220 ea.	216.4 ea.	+276.5
	Four fuselage tanks:	365	364	+304.4
Fuel Capacity (Gal.)				
Model 400T(TX) (Cont.)	Gravity Fueling			
	Two wing tanks:	215 ea.	211.5 ea.	+276.5
	Four fuselage tanks:	317	316	+303.4
	See NOTE 1 for data on unusable fuel.			
Oil Capacity (Gal.)	Two engine mounted tanks:			
	Total 2.03 each; usable 1.20 each; ARM = +342.2			
	See NOTE 1 for data on undrainable oil.			
Maximum Operating Altitude	41,000 ft.			
Control Surface Movements	Spoiler inboard	Up 68°	Down 14°	
	Spoiler outboard	Up 72°	Down 14°	
	Lateral trim	Up 25°	Down 25°	
	Elevator	Up 25°	Down 12°	
	*Pitch	L.E. Up 123.8	L.E. Down 12.8	
	Rudder	Right 30°	Left 30°	
	Rudder trim	Right 30°	Left 30°	
	Flap	Full 30°		
	Speed brake	36°		
	Yaw damper/Rudder Boost Function through primary rudder.			
	See Drawing 45A00601 for rigging tolerance.			
	*Length of the trim actuator jack screw in millimeters (mm).			
	See drawing for details.			
Serial Nos. Eligible	TT-1 and On (T-1A). See NOTE 5.			
	TX-1 and On (TX). See NOTE 5.			

**Data Pertinent to Model 400T**

Datum	Located 71.65 in. forward of the front face of the forward pressure bulkhead.
MAC	73.11 in. (L.E. of MAC at +251.09)
Leveling Means	Seat rails
Certification Basis	Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by 25-1 through 25-40, plus FAR 25.1335, 25.1351(d), 25.1353(c)(5), and 25.1447 of Amendment 25-41; FAR 25.29, FAR 25.255, and FAR 25.1353(c)(6) of Amendment 25-42; and FAR 25.361(b) and 25.1329(h) of Amendment 25-46; and FAR 25.561, 25.562, 25.773, 25.783(j), 25.785, 25.853, 25.863, 25.1331, 25.1351(c), 25.1585(d), and 25.1585(e) of Amendment 25-70. Part 36 of the Federal Aviation Regulations effective December 1, 1969, as amended by 36-1 through 36-18; Part 34 of the Federal Aviation Regulations effective September 10, 1990; Special Conditions No. 25-ANM-33 dated June 18, 1990 (Lightning and Radio Frequency Energy Protection).

**Data Pertinent to Model 400T** (cont'd)Equivalent Safety Items

- (1) Out-of-trim characteristics FAR 25.255
  - (2) Pilot compartment view FAR 25.773(b)(2)
  - (3) Emergency exit marking FAR 25.811(d)(1) and 25.811(d)(2)
- Application for amended Type Certificate dated March 23, 1990.

## Production Basis

None - S/N TT-1 through TT-3. Production Certificate No. 8 - S/N TT-4 and On and S/N TX-1 and On.

## Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

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

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

Unusable fuel (two wing tanks)	48.0 lb. at +277.8	(These weights are based on a
Unusable fuel (four fus. tanks)	5.7 lb. at +277.8	fuel specific weight of 6.701
Total unusable fuel	53.7 lb. at +277.8	lb. per gallon)
Undrainable oil (two engines)	2.4 lb. at +342.2	
Hydraulic fluid	8.3 lb. at +349.6	

NOTE 2. The aircraft must be operated according to the FAA Approved Airplane Flight Manuals Beech Part Number 132-590002-5 (TT-1 and On) or 134-590002-1 (TX-1 and On).

NOTE 3. Airworthiness Limitations containing overhaul times, replacement times, and special inspections required for continued airworthiness are listed in Section 4 of the Maintenance Manual, Beech Part No. 132-590002-3 (TT-1 and On) or 134-590002-5 (TX-1 and On).

NOTE 4. The following models must be modified to be eligible for civil registration in the transport category. The Beech mod drawing identifies all required changes.

<u>Model</u>	<u>Manufactured Config.</u>	<u>Beech Mod.</u>	
400T	T-1A Jayhawk	132-005002	Transport Category
400T	TX	134-005000	Transport Category

NOTE 5. Company name change effective 4/15/96. The following serial numbers are manufactured under the name of Raytheon Aircraft Company: 400T(T-1A): TT-131, TT-138, TT-139, TT-143 through TT-180. 400T(TX): TX-9 through TX-13.

NOTE 6. Model 400T(T-1A) aircraft must have Collins TCAS II System updated to collision avoidance system logic 6.04A to be eligible for civil registration.

.....END.....