TYPE-CERTIFICATE

DATA SHEET

NO. EASA.IM.A.172

for
HAWKER 4000

Type Certificate Holder
Textron Aviation Inc.

One Cessna Boulevard
Wichita, KS 67215
United States of America

For models: 4000

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SECTION A: HAWKER 4000

A.I. General

1. Type/ Model/ Variant	
1.1 Type	Hawker 4000
1.2 Model	4000
1.3 Variant	N/A
2. Airworthiness Category	Normal
3. Performance Class	A
4. Manufacturer	Hawker Beechcraft Corporation
5. EASA Type Certification Application Date	31st December 2001
6. State of Design Authority	Federal Aviation Administration (US)
7. State of Design Authority Type Certificate Date	21st November 2006
8. EASA Type Certification Date	03rd May 2010
9. Eligible Serial Numbers	The EASA Type Certificate has been established for Aircraft Serial Numbers RC-18, RC-20 and after. Aircraft RC-7 through RC-17 and RC-19 are not in compliance with the EASA defined certification basis and do not conform to the EASA approved Type Definition[1]). For eligible serial number a/c, before initial acceptance for registration under the EASA type certification basis compliance must be established to the full list of required kits as identified in addendum 5 of the type definition.

[1] Ref. Section A.III.1

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	1st August 2000
2. FAA Airworthiness Requirements	FAR Part 25 Amendment 25-1 through 25-105 and 25.856 at amendment 25-111, as amended by the G-1 Issue Paper (detailed in the FAA TCDS).
3. EASA Airworthiness Requirements	JAR 25 Change 15 (except as noted below)

4. Special Conditions (Issued in accordance with Paragraph 16 of JAR 21):

– C-01	Sustained Engine Imbalance
– C-02	Engine and APU Load Condition
– C-03	Interaction of Systems and Structure
– C-04	Ground Gust
– C-05	Flight Test Load Measurement
– C-06	Flight Control Jams
– C-08	Towbarless Towing
– C-09	Crashworthiness
– C-10	Emergency Landing
– C-11	Composite Structure
– C-12	Secondary Bonded Structure
– C-17	High Alt Decompression
– C-19	Vibration and Buffet
– C-20	Design Manoeuvres, Pitch Manoeuvre
– C-21	Design Manoeuvres, Electronic Systems
– C-22	Taxi, Take Off and Landing Roll
– C-23	Gust Loads
– C-24	Structural Flammability Resistance
– D-01	Towbarless Towing
– D-03	Doors
– D-07	Post Crash Fire - Composite Fuselage
– D-08	In-Flight Fire - Composite Fuselage
– D-14	High Altitude Operation, Cabin Heat Load
– F-01	HIRF

5. Exemptions	None
6. Deviations	None

7. Equivalent Safety Findings (in accordance with Paragraph 21 of JAR 21):

- CRI D-06 Entry Door Water Barrier
- CRI D-09 Frangible Lavatory Door
- CRI D-11 Gust Lock
- CRI D-12 Exit Sign Size
- CRI E-01 Thrust Reversers
- CRI F-10 Hydraulic Functional testing
- CRI F-11 Standby Instruments
- CRI G-01 Digital Display of Secondary Engine Parameters
- CRI G-02 Non-Essential APU Flight Deck Instrumentation

8. Elect to comply Requirements:

- 25.723 Shock absorption tests (CS-25 Amdt 1)
- 25.791 Passenger Information Signs and Placards (CS-25 Amdt 1)
- 25.981(a)(3) Fuel Tank Ignition (CS-25 Amdt 1)[2]
- 25.1435 Hydraulic Systems (CS-25 Amdt 1)

9. Environmental Protection — see EASA Type Certificate Data Sheet Noise ref TCDSN IM.A.172.

[2] See Note 5

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	4000E0951 Revision 21 or later including Addendum 5 for EASA specific requirements.
2. Description	The Model 4000 is a twin engine, swept wing, super mid-sized executive jet with a design maximum take-off weight of 39,500 lbs (17,916 Kgs). The maximum operating speed is 350 kts (Mach 0.84) and maximum operating altitude of 45,000ft. The aeroplane is powered by two Pratt & Whitney Canada turbofan engines (PW308A) with a maximum sea level takeoff thrust rating of 6,904 lbs. The airframe is an all metallic wing and composite fuselage and composite/ metallic empennage. The aeroplane is fitted with the Honeywell Primus EPIC Avionics System and is designed for 2 crew and up to 10 passengers.
3. Equipment	The equipment must be installed as established by the applicable requirements. (Ref. to Section A.V for the EASA Master Minimum Equipment List).
4. Engine	
4.1. Model	Two Pratt and Whitney Canada (P&WC) PW308A Turbofan Powerplants
4.2 Type Certificate	EASA Engine Type Certificate No. EASA.IM.E.057
5. Auxiliary Power Unit	Honeywell 36-150 HH APU Refer to applicable approved manuals for servicing information.
6. Propeller	None
7. Fluids[3]	Conforming to Pratt & Whitney company specifications CPW 204, refer to the limitations section of the EASA approved Airplane Flight Manual (AFM).

[3] Fuel, Oil, Additives, Hydraulics

8. Fuel capacity

Density: 0.8 kg/litre or 6.7 lbs/US gal

Tank	Capacity, US gal (litre)	Usable Fuel
LH	1094.7 (4143.9)	1090.1 (4126.5)
RH	1094.7 (4143.9)	1090.1 (4126.5)

Unusable Fuel	77.5 lbs (35.2 kg) total
Drainable	61.6 lbs (28.0 kg)
Undrainable	15.9 lbs (7.2 kg)

9. Air Speeds

V_{MO}: - 1000 to < 8000ft 280 KIAS
≥ 8000ft to 20000ft 350 KIAS
32000ft 307 KIAS
(Linear variation, 20000ft to 32000ft)

M_{MO} (above 32,000 ft) 0.84 Mach

V_{FE} (12°): 230 KIAS
V_{FE} (20°): 230 KIAS
V_{FE} (35°): 180 KIAS

V_{LE}: 230 KIAS
V_{LORET} : 210 KIAS
V_{LOEXT} : 230 KIAS
$V_{LO\ EMER\ EXT}$: 200 KIAS

V_A : 1,000 to 45,000 ft. 210 KIAS

V_{RA}/M_{RA}:

Standard Aircraft	Increased Gross Weight Aircraft	Standard Aircraft	Increased Gross Weight Aircraft
1,000 to 37,685 ft	1,000 to 38,100 ft	245 KIAS	235 KIAS
37,685 to 45,000 ft	38,100 to 45,000 ft	0.77 Mach	0.75 Mach

V_B/M_B:

Standard Aircraft	Increased Gross Weight Aircraft	Standard Aircraft	Increased Gross Weight Aircraft
1,000 ft.	1,000 ft	250 KIAS	235 KIAS
5,000 ft	5,000 ft	251 KIAS	235 KIAS
10,000 ft	10,000 ft	252 KIAS	235 KIAS
15,000 ft	15,000 ft	253 KIAS	235 KIAS
20,000 ft	20,000 ft	255 KIAS	235 KIAS
25,000 ft	25,000 ft	257 KIAS	235 KIAS
30,000 ft	30,000 ft	260 KIAS	235 KIAS
36,000 ft		265 KIAS/ 0.80 Mach	
	38,100 ft		235 KIAS/ 0.75 Mach
45,000 ft	45,000 ft	0.80 Mach	0.75 Mach

V_{SB}/M_{SB} : NO LIMIT

V_{MCA} :

- Flaps 0° 99 KIAS
- Flaps 12 ° Below stick pusher at all weights
- Flaps 20° Below stick pusher at all weights

V_{MCG} : 85 KIAS

V_{MCL} :

- Approach Flaps 12° Below stick pusher at all weights
- Landing Flaps 35° Below stick pusher at all weights

V_{TIRE} : 182 KNOTS

10. Flight Envelope — Refer to EASA approved AFM

11. Operating Limitations

11.1 Approved Operations — Eligible for the following kinds of operation when the appropriate equipment and instruments required by the operation requirements are installed, approved and operating as defined by the MMEL:

- CAT I
- VFR (Visual)
- IFR (Instrument)
- Day

- Night
- Icing
- Enhanced Surveillance
- RVSM

11.2 Other Limitations	Refer to EASA approved AFM, Airplane Maintenance Manual 401-590001-0015 (AMM), and Airworthiness Limitations Manual 401-590001-0024 (ALM)[4].
12. Maximum Certified Masses	Max Ramp Weight 39,700 lbs (18,007 kg) Max Takeoff Weight 39,500 lbs (17,916 kg) Max Landing Weight 33,500 lbs (15,195 kg) Max Zero Fuel Weight 26,000 lbs (11,793 kg)
13. Centre of Gravity Range	Refer to EASA approved AFM
14. Datum	Refer to FAA TCDS.
15. Mean Aerodynamic Chord (MAC)	Refer to FAA TCDS.
16. Levelling Means	Refer to FAA TCDS.
17. Minimum Flight Crew	Two (2): one (1) pilot and one (1) co-pilot
18. Maximum Seating Capacity	See Note 1. The aircraft is certified for carriage of 10 passengers provided approved seating arrangement and related required passenger provisions are incorporated in accordance with the EASA Certification Basis
19. Baggage/Cargo Compartment	Cargo compartment loading must be accomplished in accordance with limitations as outlined in Weight and Balance Manual.

[4] See Notes 2 and 3

A.IV. Operating and Service Instructions

1. Flight Manual	401-590001-0035 Revison A1 (or later approved EASA revision) 401-590001-0078 (for a/c serial number RC-59 and after, or prior a/c serial numbers with Kit 401-3007 or 401-3008 or 401-3027 or 401-3028 installed for Block Point Upgrade A. (See Note 6)
2. ICA and Airworthiness Limitations	
2.1 Service Information:	Service Bulletins and Continuing Airworthiness Instructions (AMM 401-590001-0015 Chapter 4) containing the statement that the document is approved by the USA FAA are accepted by EASA according to the EASA Certification Basis and the EASA approved Type Design of the aeroplane
2.2 Maintenance Instructions:	Information essential to the proper servicing and maintenance of the aircraft is contained in the Instructions for Continued Airworthiness, Model 4000 AMM Maintenance Manual 401-590001-0015 Revision A7, April 2010, or later revision.
2.3 Airworthiness Limitations:	Mandatory replacement times, structural inspection intervals, and related structural inspection procedures and Certification Maintenance Requirements are presented in the approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness, Chapter 4, Model 4000 AMM 401-590001-0015 A7 (or later EASA approved revision)[5]
3. Weight and Balance Manual	Hawker Model 4000 Weight & Balance Manual, For Weight and Balance information, refer to the appropriate FAA Approved Weight and Balance Manual.

[5] See Note 4

A.V. Operational Suitability Data (OSD)

(Reserved)

A.VI. Notes

Note 1. The aircraft type certified at the Hawker Beechcraft factory is in a "without passenger interior" configuration and carriage of passengers or baggage is prohibited. The "with passenger interior" configuration includes up to ten passengers and baggage approved by STC or equivalent approval method.

Note 2. Aircraft without passenger interior are limited to 100 flight hours.

Note 3. The Model 4000 has been approved for high altitude operations. Any modifications to the pressure vessel must be approved in accordance with the requirements as shown in the certification basis. This included modifications which could result in a pressure vessel opening, such as the loss of an antenna, greater than 4.35 square inches..

Note 4. Certification Maintenance Requirements (CMR) are found in the Airworthiness Limitations Manual Chapter Four (4). Engineering approval of the CMRs in documented in report 4000E285673, Certification Maintenance Requirements.

Note 5. For Aeroplane Flight Manual from serial number RC-59 or prior a/c fitted with kit SB28-3950.

Note 6. For aeroplanes registered in EASA Member States primarily using metric units, metric supplement P/N 401-590001-0091 Volumes 1 of 2 and 2 of 2 may be carried onboard instead of P/N 401-590001-0078 Performance Volumes 2 of 3 and 3 of 3 with Imperial units

SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

AFM	Airplane Flight Manual
ALM	Airworthiness Limitations Manual
AMM	Airplane Maintenance Manual
APU	Auxiliary Power Unit
CMR	Certification Maintenance Requirements
CRI	Certification Review Item
CS	Certification Specification
EC	European Commission
EASA	European Aviation Safety Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
HIRF	High Intensity Radiated Field
ICA	Instructions for Continued Airworthiness
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirements
MMEL	Master Minimum Equipment List
RVSM	Reduced Vertical Separation Minima
SC	Special Condition
STC	Supplemental Type Certificate
TC	Type Certificate
TCDS	Type Certificate Data Sheet
VFR	Visual Flight Rules
WBM	Weight and Balance Manual

II. Type Certificate Holder Record

Up to 11th October 2016:
Hawker Beechcraft Corporation
9709 E. Central
Wichita, Kansas 67206, United States of America

Since 12th October 2016:
Textron Aviation Inc.
One Cessna Boulevard
Wichita, KS 67215, United States of America

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	03 May 2010	Initial Issue	Initial Issue, 03/05/10
Issue 02	04 May 2010	– Section 1.III.13 (former 1.6) – Correction of MTOW value to 17.916 Kgs	
Issue 03	30 January 2012	– Section 1.II.9: Additional Elect to Comply. – Section 1.III.12.2: Deletion of specific AFM reference. – Section 1.IV.1: AFM reference change. – Section 1.IV.2: Airworthiness Limitations update. – Section 1.V: Addition of Notes 5 and 6.	
Issue 04	16 March 2018	– Type Transferred to Textron Aviation – Type Renamed according to Textron guidelines – Section A.III.9: Updated (mistake) – Added Section A.V for OSD (Reserved) – Format update (includes renaming of Section 1 as Section A)	Reissued, 16/03/2018

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