OPERATIONAL EVALUATION REPORT

TEXTRON AVIATION, INC.

MODEL 408 SKYCOURIER

ORIGINAL – APRIL 20, 2023

Revision Control

REVISION	DATE	HIGHLIGHTS OF CHANGE
Original	April 20, 2023	Original report.

Approval

Mario Igawa

Manager, Aeronautical Product Design Certification Branch
Department of Airworthiness

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1 General

1.1 Acronyms

14 CFR	Title 14 of the Code of Federal Regulations
AC	Advisory Circular
AEG	Aircraft Evaluation Group
AFM	Airplane Flight Manual
ANAC	*Agência Nacional de Aviação Civil* (Brazilian Civil Aviation Authority)
EDM	Emergency Descent Mode
EFB	Electronic Flight Bag
ESP	Electronic Stability and Protection
FAA	Federal Aviation Administration
FMS	Flight Management System
FSB	Flight Standardization Board
FSTD	Flight Simulation Training Device
FTD	Flight Training Device
IS	*Instrução Suplementar* (Supplementary Instruction)
MDR	Master Differences Requirements
ODR	Operator Differences Requirements
PIC	Pilot in Command
RBAC	*Regulamento Brasileiro de Aviação Civil* (Brazilian Civil Aviation Regulation)
TCDS	Type Certificate Data Sheet
VNAV	Vertical Navigation

2 Introduction

2.1 Background

ANAC operational evaluation of Textron Aviation Model 408 aircraft was conducted through documental analysis using the information provided by the manufacturer (including Original Release of AFM, issued by Textron Aviation and approved by FAA on March 7th, 2022) and the determinations of the FAA Flight Standardization Board (FSB) Report, Original Release dated April 1st, 2022.

Additionally, supplementary information was provided by the manufacturer in a meeting attended by ANAC Aircraft Evaluation Group, FAA Aircraft Evaluation Group and Textron Aviation, on November 22th, 2022.

In case more detailed information is required, refer to the FAA FSB Report mentioned above.

2.2 Objective

This report presents ANAC collection of results obtained from the operational evaluation of Cessna airplane model 408 SkyCourier.

2.3 Purpose

The purpose of this report is to:

a. Determine the pilot type rating assigned for the Model 408 aircraft;

b. Recommend the minimum requirements for initial, transition and recurrent training, checking and currency applicable to flight crew for the Model 408; and

c. Determine operational suitability of Model 408 aircraft.

2.4 Applicability

This report is applicable to:

a. ANAC employees responsible for training programs analysis and approval;

b. ANAC employees and designees responsible for airmen certification; and

c. Aircraft operators and training providers certified/ approved under Brazilian requirements to assist them in developing their flightcrew member training, checking, and currency.

2.5 Cancelation

Not applicable.

3 Aircraft Description

3.1 General

The Cessna Model 408 SkyCourier is a single-pilot certified airplane powered by two turboprop engines with a 19-seat or freighter version.

The SkyCourier is equipped with the Garmin G1000 NXi avionics system.

3.2 Aircraft Approach Category

With reference to DECEA publication AIC N03/21 dated 28 Jan. 2021, the approach category for the Model 408 is as follows:

Aircraft	Category
408	B

The category is based on the approach speed provided by the manufacturer and need to be reconsidered if operators increase the approach speed.

3.3 All Weather/ Low visibility Operations

The Model 408 is certified for operations to Category I minima.

3.4 Operations

3.4.1 Maximum Altitude

Maximum Operating Altitude: 25,000 ft.

3.5 Forward Observer Seat

The Model 408 is not equipped with a dedicated forward observer seat, however the right flightdeck seat and row 1 middle passenger seat (#1B) was evaluated by the FAA. The Freighter aircraft can be ordered with the option to configure a seat in the same location as seat #1B in the passenger aircraft. The Flight Deck Observer Seat was evaluated and determined by the FAA to meet the requirements of §§ 125.317(b) of 14 CFR Part 125 and 135.75(b) of 14 CFR Part 135, and the current edition of AC 120-83, Flight Deck Observer Seat and Associated Equipment, to conduct all checks.

3.6 Electronic Flight Bag (EFB)

Electronic charts and checklists were evaluated by FAA as part of the G1000NXi avionics system found to be suitable for all approved operations.

4 Pilot Type Rating

Textron Aviation Cessna Model 408 type rating designation is CE-408.

Table 1 - Pilot Type Rating

Fabricante *(Manufacturer)*	**Aeronave** *(Aircraft)*		**Observações** *(Remarks)*	**Designativo** *(Designative)*
	Modelo *(Model)*	**Nome** *(Name)*		
Textron Aviation, Inc.	408	SkyCourier	Relatório de Avaliação Operacional Textron 408 *ANAC Operational Evaluation Report Textron 408*	CE-408

5 RELATED AIRCRAFT

5.1 Related Aircraft on Same TCDS

The Model 408 is offered in a Freighter version and a Passenger version. The Freighter is a Level 1 aircraft while the Passenger version is a Level 4 as defined by the certification basis provided for in 14 CFR Part 23, Amendment 64.

5.2 Related Aircraft on Different TCDS

Not applicable.

6 Specifications for Pilot Training

6.1 Airman Experience

Airmen receiving initial Model 408 training should have previous training in multi-engine aircraft and turboprop experience, new generation avionics, and Flight Management System (FMS) experience. Pilots without this experience may require additional training.

6.2 Special Emphasis Areas.

6.2.1 Pilots must receive special emphasis on the following areas during initial and recurrent ground training:

a) Function and use of integrated avionics system to include the autopilot, ESP, EDM and stick pusher.

b) Oxygen system operation, indications, and mask usage.

6.2.2 Pilots must receive special emphasis on, and perform the following areas during initial and recurrent flight training:

a) Function and use of integrated avionics system to include the autopilot, VNAV, ESP, EDM and stick pusher.

6.3 Specific Flight Characteristics

There are no specific flight characteristics.

6.4 Seat-Dependent Tasks.

There are no specific seat dependent tasks. However, the minimum crew determination listed in the AFM is one pilot in the left seat. As such, the pilot must occupy the left pilot seat for all pilot-in-command (PIC) training as a single pilot.

6.5 Regulatory Training Requirements Which Are Not Applicable to the Model 408.

6.5.1 RBAC 135.331 (b)(3)(i) Rapid Decompression.

6.5.2 RBAC 91.1083 (b)(3) (i) Rapid Decompression.

6.6 Flight Simulation Training Devices (FSTD)

There are no specific systems, procedures, or maneuvers that are unique to the Model 408 that require a specific FSTD for training.

6.7 Training in aircraft

There are no specific systems or procedures that are unique to the Model 408 that require specific training equipment.

6.8 Differences Training Between Related Aircraft

Pilots must receive differences training between the Model 408 Freighter and Passenger versions as applicable to their operation. The level of training is specified in ODR table (appendix 2).

7 PILOT CHECKING

7.1 Landing from a No Flap or Non-Standard Flap Approach

The probability of flap extension failure on the Model 408 is not extremely remote due to system design. Therefore, demonstration of a no flap approach and landing is required.

7.2 Specific Flight Characteristics

Maneuvers or procedures required to be checked as referenced in the ANAC Supplementary Instruction – IS 00-002. There are no specific flight characteristics.

7.3 Seat-Dependent Tasks.

There are no specific seat dependent tasks. However, the minimum crew determination listed in the AFM is one pilot in the left seat. As such, the pilot must occupy the left pilot seat for all practical tests and proficiency checks as a single pilot.

7.4 Other Checking Items.

Not applicable.

7.5 Flight Simulation Training Devices (FSTD).

There are no specific systems, procedures, or maneuvers that are unique to the Model 408 that require a specific FSTD for checking.

7.6 Equipment.

There are no specific systems or procedures that are unique to the Model 408 that require specific equipment.

7.7 Differences Checking Between Related Aircraft.

There are no differences checking required between the Model 408 Freighter and Passenger versions.

8 Currency

There are no additional currency requirements for the Model 408 other than those already specified in RBAC 61, 91 and 135.

8.1 Differences Currency Between Related Aircraft.

Not applicable.

9 Operational Suitability

The Model 408 was determined operationally suitable for operations under 14 CFR Parts 91, 125, and 135 by the FAA. No flight was conducted by the ANAC to determine operational suitability of the Model 408 for operations under the RBAC 91 and 135.

Appendix 1 – Master Difference Requirements (MDR)

These are the minimum levels of training, checking and currency required, derived from the highest level in the ODR table in Table 3. Differences levels are arranged as training/checking/currency.

Table 2 – CE-408 MDR matrix

		FROM AIRPLANE	
		Model 408 Freighter	Model 408 Passenger
TO AIRPLANE	Model 408 Freighter	Not Applicable	Not Evaluated
	Model 408 Passenger	A/A/A	Not Applicable

Appendix 2 – Operator Difference Requirements (ODR)

This ODR table, from the Model 408 Freighter to the Model 408 Passenger version was proposed by Textron Aviation and validated by the FSB (FAA) on November 2021. It lists the minimum differences levels operators must use to conduct differences training, checking and currency of flightcrew members.

Table 3 – CE-408 ODR matrix

FROM BASE AIRCAFT: Model 408 Freighter TO RELATED AIRCRAFT: Model 408 Passenger	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING	CURRENCY
	Passenger Oxygen System (Optional)	Operated by added switch in the cockpit.	No	Yes	A	A	A
	Emergency Lighting System	Armed by added switch in cockpit.	No	Yes	A	A	A
	Emergency Exits	Emergency exits in cabin area.	No	Yes	A	A	A
	Seatbelt Sign	Operated by added switch in the cockpit.	No	Yes	A	A	A
	Passenger Airstair	Fold out stairs added to aft door opening.	No	No	A	A	A