



## CERTIFICADO SUPLEMENTAR DE TIPO (Supplemental Type Certificate)

**NÚMERO: 2020S05-04**  
(Number)

**Este Certificado, emitido com base na Lei nº 7565 "Código Brasileiro de Aeronáutica", de 19 de dezembro de**

*This Certificate, issued in the basis of the Law No 7565 "Código Brasileiro de Aeronáutica", dated 19 December*

**1986, é conferido ao (à): Peregrine**

*1986, is granted to:* 7385 S. Peoria Street Unit C4  
Englewood, CO 80112  
USA

**por ter a modificação ao projeto de tipo do produto abaixo citado, observadas as limitações e condições**

*for having the change to the type design of the product mentioned below, with the limitations and conditions*

**especificadas, satisfeito aos requisitos de aeronavegabilidade aplicáveis.**

*conditions there for as specified hereon, met the applicable airworthiness requirements.*

**Produto Original - Número do Certificado de Tipo:** \* See attached ANAC Approved Model List (AML),  
*Original Product - Type Certificate No:* Rev. I.R., dated 06 May 2020,  
or later approved revision.

**Fabricante:** \*  
*Manufacturer:*

**Modelo(s):** \*  
*Model (s):*

### **DESCRIÇÃO DA MODIFICAÇÃO AO PROJETO DE TIPO:**

*Description of Type Design Change:*

Installation of Automatic Dependent Surveillance - Broadcast (ADS-B) Out and In functionality using the Garmin GTX 335R and GTX 345R Transponders and qualified position sensor, as specified on the FAA AML for STC No. ST00835DE, in accordance with Peregrine Master Drawing List, Document No. E-SE-16-0002, Rev. N, dated 20 Apr. 2018, or later approved revision.

This CST validates in Brazil the STC No. ST00835DE, issued by FAA (USA).

### **LIMITAÇÕES E CONDIÇÕES:**

*Limitations and Conditions:*

See continuation sheet for applicable data.

**DATAS:** **Do requerimento:** 29 Feb. 2020  
*Dates of:* *Application:*

**Da reemissão:**  
*Reissuance:*

**Da emissão:** 06 May 2020  
*Issuance:*

**Da emenda:**  
*Amendment:*

*Certificado assinado digitalmente (Digitally signed Certificate)*

F-400-01G (SEI 12.16)

Fl. 01 de 04  
Sheet of

H.02-5341-0

**Nota:**

*(Note:)*

- a) Este Certificado e os dados técnicos com base nos quais ele foi emitido são válidos até que sejam cancelados, suspensos, revogados ou um prazo limite seja estabelecido pela Agência Nacional de Aviação Civil.  
*(This Certificate and the supporting technical data used for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Agência Nacional de Aviação Civil.)*
- b) No caso de transferência de propriedade deste Certificado, o transferente deve preencher o quadro "Endosso de Transferência", e o adquirente deve enviar este Certificado à Gerência Geral de Certificação de Produto Aeronáutico para que seja reemitido em seu nome.  
*(In case of transfer of the property of this Certificate, the grantor should fill the blanks of "Transfer Endorsement", and the transferee must remit this Certificate to the Gerência Geral de Certificação de Produto Aeronáutico to permit reissuance of the Certificate in his name.)*

**ENDOSSO DE TRANSFERÊNCIA**

*(Transfer Endorsement)*

**Transfiro a propriedade deste Certificado Suplementar de Tipo para:**

*(I transfer the property of this Supplemental Type Certificate to:)*

**ADQUIRENTE**

*(Transferee)*

**Nome:** .....

*(Name:)*

**Rua:** .....

*(Street:)*

**CEP:** ..... **Cidade:** .....

*(Zip:)*

*(City:)*

**Estado:**.....

*(State:)*

**País:** .....

*(Country:)*

**TRANSFERENTE**

*(Grantor)*

**Nome:** .....

*(Name:)*

**Rua:** .....

*(Street:)*

**CEP:** ..... **Cidade:** .....

*(Zip:)*

*(City:)*

**Estado:**.....

*(State:)*

**País:** .....

*(Country:)*

**Data de Transferência:** .....

*(Date of Transfer:)*

**Assinatura do** .....

**Transferente:**

*(Signature of the Grantor:)*

**Nome:** .....  
(Name:)

**Cargo:** .....  
(Function:)



Folha de Continuação ao  
(Continuation Sheet to)

## **CERTIFICADO SUPLEMENTAR DE TIPO** (Supplemental Type Certificate)

**NÚMERO: 2020S05-04**  
(Number)

### **LIMITAÇÕES E CONDIÇÕES:**

*Limitations and Conditions:*

- I. The approval of this type design change should not be extended to other aircraft of these models on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and any of those other previously approved modifications, including changes in Type Design, will introduce no adverse effect upon the airworthiness of those aircraft.
- II. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.
- III. Operation must be performed in accordance with the FAA approved Airplane Flight Manual Supplement (AFMS), Peregrine Document No. E-SE-16-0009, Rev. B, dated 11 July 2018, or later FAA approved revision.
- IV. The maintenance of the aircraft shall be performed in accordance with the Peregrine Instructions for Continued Airworthiness (ICA), Document No. E-SE-16-0008, Rev. A, dated 29 Aug. 2017, or later FAA accepted revision.
- V. This CST does not constitute an ANAC approval document for the installation of the equipment below, which is a prerequisite/concurrent requirement for this CST, with that equipment being properly linked to satisfy the intended function for the system. So, another ANAC approval must be used for such installation, which englobes:
  - Transponder system, including:
    - i. Standalone transponder, and
    - ii. Technical Standard Order (TSO) approved transponder antenna which meets the requirements of TSO-C66, TSO-C112, TSO-C74,
  - A digital altitude encoder that outputs either Gillham code (ARINC 429) or serial altitude data (RS-232),
  - An air data computer,
  - New or replacement transponder antenna,
  - New or replacement GPS antenna,
  - New or replacement Universal Access Transceiver (UAT) antenna, and
  - A Weight On Weels (WOW) system.





Folha de Continuação ao  
(Continuation Sheet to)

## **CERTIFICADO SUPLEMENTAR DE TIPO** (Supplemental Type Certificate)

**NÚMERO: 2020S05-04**  
(Number)

### **LIMITAÇÕES E CONDIÇÕES:**

*Limitations and Conditions:*

- VI. This CST does not constitute an ANAC approval document for the installation of the position sensors below. So, if any of the following position sensors is utilized to provide position data to the ADS-B Out system, another ANAC approval must be used for such installation (including the associated GPS antenna), which englobes:
- Garmin GNS 400W/500W Series GPS/WAAS receiver,
  - Garmin GTN 650 Series GPS/WAAS receiver, and
  - Garmin GTN 750 Series GPS/WAAS receiver.
- VII. This CST does not allow or provide instructions for installation on aircraft equipped with Traffic Collision Avoidance System (TCAS) II.
- VIII. This CST does not allow or provide instructions for interfacing with aircraft displays or alerting systems, including traffic advisory systems or TCAS I. If ADS-B data is displayed on a Portable Electronic Device (PED) via the Garmin Flight Stream 110, the ADS-B In data is for situational awareness only.
- IX. This CST does not allow or provide instructions for an interfacing the Flight Stream 110 with any position sensor listed above.
- X. This CST does not include installation approval of software updates to the position sensors identified in the limitation No. VI, above.
- XI. This CST does not include the implementation of any 978 MHz UAT ADS-B Out transmit functionality.
- XII. This CST does not allow or provide instructions for penetrating the pressure vessel.
- XIII. The installation of the replacement GTX 335R and GTX 345R transponder systems does not affect the airworthiness of the Reduced Vertical Separation Minimums (RVSM) system. The installer should review the RVSM equipment list and determine if the transponder is listed by model number.
- XIV. This CST provides optional ADS-B In functionality of Traffic Information Services – Broadcast (TIS-B) and Flight Information Service - Broadcast (FIS-B). Approval of the TIS-B functionality is limited to basic airborne (AIRB) and Enhanced Visual Acquisition (EVAcq) only. Approval of the FIS-B functionality does not include the following:
- Aviation Selected Special Weather Reports (SPECI),
  - Convective Significant Meteorological Information (SIGMETS), and

- Flight Data Center (FDC) Notices to Airmen (NOTAM).

F-400-01G (SEI 12.16)

F1. 03 de 04  
*Sheet of*

H.02-5341-0



Folha de Continuação ao  
(Continuation Sheet to)

## **CERTIFICADO SUPLEMENTAR DE TIPO** (Supplemental Type Certificate)

**NÚMERO: 2020S05-04**  
(Number)

### **LIMITAÇÕES E CONDIÇÕES:**

*Limitations and Conditions:*

- XV. This CST does not allow ADS-B In functionality to be activated without operating ADS-B Out functionality.
- XVI. This CST does not allow or provide instructions for Enhanced Surveillance Mode functionality.
- XVII. Use of transponder formats other than those identified within the CST Master Drawing List is not allowed.
- XVIII. The Certification Basis for parts changed or approved by this change, as specified on the FAA AML for STC No. ST00835DE is applicable.
- XIX. A copy of this Certificate, the Supplement referred on item III above and the ANAC Approved Model List (AML) for CST No. 2020S05-04 shall be maintained as part of the permanent records for the modified aircraft.





Documento assinado eletronicamente por **Mário Igawa, Gerente-Geral de Certificação de Produtos Aeronáuticos**, em 06/05/2020, às 15:44, conforme horário oficial de Brasília, com fundamento no art. 6º, § 1º, do [Decreto nº 8.539, de 8 de outubro de 2015](#).

---



Documento assinado eletronicamente por **Roberto José Silveira Honorato, Superintendente de Aeronavegabilidade**, em 06/05/2020, às 22:12, conforme horário oficial de Brasília, com fundamento no art. 6º, § 1º, do [Decreto nº 8.539, de 8 de outubro de 2015](#).

---



A autenticidade deste documento pode ser conferida no site <https://sei.anac.gov.br/sei/autenticidade>, informando o código verificador **4296726** e o código CRC **448D7026**.

---