# Reporte de Aceptación de Certificado Tipo


# *Type Certificate Acceptance Report*

## No. EASA A.412, Issue 02

## TECNAM P92-JS

# TABLA DE CONTENIDO
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## RESUMEN *(SUMMARY)*

La aceptación de Tipo Colombiana ha sido otorgada para el modelo P92JS de TECNAM basados en el Certificado Tipo de la EASA número A.412 Emisión 02.

La aplicabilidad es para el modelo TECNAM P92JS, que ya son elegibles para la emisión de un Certificado de Aeronavegabilidad Estándar de acuerdo con los Reglamentos Aeronáuticos Colombianos RAC numeral 4.4.1.8., esta aceptación estará sujeta a cualquier requerimiento excepcional operacional que requiera ser cumplido (Ver ítem 5 de este reporte para una revisión del cumplimiento del diseño básico con las reglas operacionales).

*Colombian Civil Aviation Authority grants Type Certificate Acceptance for the model P92JS of TECNAM based on the EASA Type Certificate A.412 Issue 02.*

*Applicability is for TECNAM P92JS model, which is eligible for the issue of a Standard Airworthiness Certificate according to Colombian Regulations - RAC section 4.4.1.8. This Acceptance is subject to any outstanding Colombian operational requirement. (See item 5 of this report for a review of compliance of the basic type design with the operating Rules).*

## 1. INTRODUCCIÓN *(INTRODUCTION)*

Este reporte detalla los aspectos para la aceptación del Certificado Tipo de la EASA A.412, con el objeto de emitir un Certificado de Aeronavegabilidad Estándar en Colombia, de acuerdo con los RAC Parte 9ª literal **§9.1 (d) y 9.2.3**.

*This report details the basis on which EASA Type Certificate No. A.412 was accepted, for the issue of the Colombian Standard Airworthiness Certificate, in accordance with the RAC's, part **9.1 (d)** and* **9.2.3**.

Específicamente este reporte esta dirigido a:
*Specifically the report aims to:*

| | |
|---|---|
| (a) Determinar los estándares de diseño del código de aeronavegabilidad asociados al certificado tipo extranjero para la aceptación de este modelo de aeronave en Colombia. | *(a) State Design standards of the airworthiness code related to the foreign Type Certificate for the acceptance of this aircraft model in Colombia.* |
| (b) Identificar cualquier condición especial, nivel equivalente de seguridad o excepción aplicable al modelo cubierto por el Certificado Tipo. | *(b) Identify any special conditions, Safety Equivalent Level, or applicable exception to a model covered by the Type Certificate.* |
| (c) Establecer cualquier requerimiento adicional que deba ser cumplido, antes de emitir el Certificado de Aeronavegabilidad Estándar en Colombia. | *(c) Determine any additional requirement that must be complied before Colombian Airworthiness Certificate be issued* |

## 2. DETALLES DE CERTIFICACIÓN DE TIPO OACI *(ICAO TYPE CERTIFICATE DETAILS)*

El modelo TECNAM P92JS cumple con los estándares de aeronavegabilidad definidos en los anexos 8 y 16 de OACI, respecto a los requisitos de diseño, requisitos de aeronavegabilidad continuada y de ruido. El fabricante establece que no existe ninguna diferencia que deba ser evaluada.

*The TECNAM P92JS model is in compliance with the ICAO annexes 8 and 16 about rules necessaries for the design, continued airworthiness conditions and noise compliance. The manufacturer establishes that there is no difference that should be evaluated.*

## 3. DETALLES DE ACEPTACIÓN DE TIPO *(TYPE ACCEPTANCE DETAILS)*

La aplicación para la aceptación del Certificado Tipo de la aeronave TECNAM modelo P92JS fue solicitada por el fabricante el 12 de noviembre de 2012 y fue aprobada el 28 de diciembre de 2012, basada en el Certificado Tipo de la EASA No. A.412, e incluye el motor Rotax 912 S2 y la hélice Hoffman HO17GHM A 174 177C, aprobados mediante certificados tipo EASA TC No. E.121 y LBA TC 32.110/1.

*The application for Colombian type certificate acceptance of the TECNAM P92JS model, was received from the manufacturer, TECNAM, on 12th November 2012, Type Acceptance Certificate was approved on 28 December 2012, based on the EASA Type Certificate A.412, and includes the Rotax 912 S2 engine and Hoffman HO17GHM A 174 177C propeller, approved under EASA TC No. E.121 and LBA Type Certificate number 32.110/1.*

## 4. REQUERIMIENTOS DE LOS RAC PARTE 9ª *(COLOMBIAN RAC PART 9TH DATA REQUIREMENTS)*

Los requerimientos establecidos en la parte Novena de los RAC han sido cumplidos y se sustentan en la hoja de datos del Certificado Tipo EASA No. A.412 Emisión 02 de fecha 01 de Febrero de 2011 y con los siguientes documentos:

*The Type Data requirements of RAC Part 9 have been satisfied according to the Type Certificate Data Sheet EASA No. A.412 issue 02 dated February 1th, 2011 and the following documents:*

(1) Certificados Tipos *(Type certificates):*

- EASA Type-Certificate Data Sheet No. A.412 for model P92JS Issue 2, dated February 1th, 2011.
- Rotax 912 S2 engine approved under EASA Type Certificate number E.121.
- Hoffman HO17GHM A 174 177C Propeller (LBA TC 32.110/1).

(2) Resumen de los ítems de Certificación *(Summary certification item)*

*(i) Certification Basis:*

This type of aircraft has been approved by EASA/ENAC in accordance with JAR-VLA of April 26 1990 with amendments 91/1 and 92/1.

*(ii) Equivalent Safety Findings ESF and Special Conditions SC (CRI´s):*

No Equivalent Safety Findings ESF or Special Conditions SC (CRI´s) has been issued.

*(iii) Airworthiness Requerements:*

JAR VLA April 26, 1990 for aircraft, Amdt 91/1 and 92/1
JAR 22 Subpart H, Change 1, for engine.
JAR 22 Subpart J, Change 4, for propeller

(3) Aircraft Noise Standard:

Noise: ICAO /Annex 16, Vol. I. 3rd Ed. 1993, Chapter 10. Type Certificate Data Sheet for Noise TCDSN EASA.A.412, Issue 3, Dated 04 October 2012.

| Document | EASA | Issue Date | Revision |
|---|---|---|---|
| Novotech Report | Noise Certification Test under ICAO Annex 16 and JAR 36, Report No. NOVO-11-01 for P92JS Aircraft. | December 14, 2001 | Rev. 0 |

(4) Certification Compliance Listing:

TECNAM Report Doc. 92/69 – CS VLA Compliance Check List for P92JS, 3th Edition, Revision 0, Dated December 12, 2001

(5) Documentación técnica del fabricante *(Maintenance Manuals, Operating Manuals and Service Instructions)*

| Document for P92JS model | EASA | Issue Date | Revision |
|---|---|---|---|
| Aircraft Flight Manual | Flight Manual, Doc. No. 92/61. | Issue No. 3, May 25th 2010 | Revision No. 0 |
| Airplane Maintenance Manual | Maintenance Manual, Doc No. 92/58. | Ed. 4 Issue May 2010 | Revision 4 21th June 2012 |
| Aircraft Parts Catalogue | Illustrated Parts Catalogue. Doc No. 92/65. | Ed. 2 | Revision 0 July 2010 |
| Aircraft Description | Description and General Characteristics Aircraft P92JS, Doc No. 92/49. | December, 2000 | Revision 3 March 2001 |

## 5. REQUERIMIENTOS ADICIONALES DE LOS RAC PARTE 4ª *(ADDITIONAL COLOMBIAN REQUIREMENTS RAC PART 4TH)*

A continuación se listan los requerimientos de aeronavegabilidad adicionales para la emisión de un certificado de aeronavegabilidad estándar, definidos en el capitulo II de la Parte Cuarta, "Requisitos generales de aeronavegabilidad" y Novena de los RAC. Para aviación comercial regular se debe agregar los requerimientos establecidos en los RAC parte Cuarta, Capitulo V.

*Compliance with the requirements for the expedition of a Standard Airworthiness Certificate, to operate in General Aviation, is according with RAC's regulations inside its part IV, Chapters II, Rules. For commercial operators include the requirements of the Colombian regulations RAC's part IV, Chapter V:*

| **Norma (*Rule*)** | **Descripción del requerimiento ( *Description*)** |
|---|---|
| 4.2.2.3. | AERONAVES CIVILES MOTORIZADAS CON CERTIFICADO DE AERONAVEGABILIDAD ESTÁNDAR DE LA REPÚBLICA DE COLOMBIA (REQUISITOS DE INSTRUMENTOS Y EQUIPO)<br>*CIVILIAN ENGINE POWERED AIRCRAFT WITH COLOMBIAN STANDARD AIRWORTHINESS CERTIFICATE (INSTRUMENT AND EQUIPMENT REQUIREMENTS)* |
| 4.2.2.4. | TRANSMISOR LOCALIZADOR DE EMERGENCIA (ELT)<br>Uno (fijo), transmisor de dos frecuencias (121.5 y 406.0 MHz). TSO – C126<br>*EMERGENCY LOCATOR TRANSMITER (ELT)*<br>*One (fixed) 2 frequencies transmitter (121.5 and 406.0 MHz). TSO – C126* |
| 4.2.2.5 | LUCES DE AERONAVES<br>*AIRCRAFT'S LIGHTS* |
| 4.2.2.7 | INSTRUMENTOS Y EQUIPOS INOPERATIVOS<br>*INOPERATIVE EQUIPMENTS AND INSTRUMENTS* |
| 4.2.2.8 | USO DE TRANSPONDER ATC<br>*ATC TRANSPONDER RIGHT USE* |
| 4.2.2.10 | SISTEMA DE ALERTA DE ALTITUD – Un sistema<br>*ALTITUDE ALERT SYSTEM – One system* |
| 4.2.2.14 | SEÑALAMIENTO DE LAS ZONAS DE PENETRACION DEL FUSELAJE |
| 9.2.3 literal d) 4 | PLACAS: IDIOMA ESPAÑOL O ESPAÑOL E INGLES<br>*PLACARDS: SPANISH OR ENGLISH AND SPANISH* |

# APENDICE 1 - LISTA DE CHEQUEO DE AERONAVES
## *(APPENDIX 1 – AIRCRAFT CHECK LIST)*

| | |
|---|---|
| CERTIFICADO TIPO (*Type Certificate* ): | EASA A.412.<br>Issue 02, February 1, 2011. |
| AERONAVES (*Aircraft*): | TECNAM P92-JS. |
| FABRICANTE (*Manufacturer*): | Construzioni Aeronautiche Tecnam S.r.l.<br>Via Tasso 478<br>80127 Napoli, Italia |
| PLANTA MOTRIZ (*Engines*): | Bombardier-Rotax GmbH Rotax 912 S2, EASA No. TC No. E.121 for TECNAM P92-JS |
| OPERADOR NACIONAL (*National Operator*): | Aeroexpress |
| FUNCIONARIO(s) (*Team*): | JOSE ORLANDO DAZA CIFUENTES<br>SAUL ANDRES GONZALEZ ORDOÑEZ |
| REGULACIONES R.A.C. (R.A.C. *Regulation*): | Numerales, 9.1 GENERALIDADES literal d)<br>9.2.3 CERTIFICADOS TIPO PARA PRODUCTOS AERONAUTICOS IMPORTADOS literal f) "*Examen de los registros de diseño tipo y los documentos de certificación del Estado que certifico la aeronave. (literales c) y d))*" |

| DOCUMENTACION | CUMPLIMIENTO (DOCUMENTOS REVISADOS) |
|---|---|
| *1.* DATOS GENERALES DEL CERTIFICADO TIPO (*Type Certificate Data Sheets*): | REVISION ACTUAL *(Actual Issue)*: 02<br>FECHA DE REVISION *(Issue Date)*: February 1, 2011.<br>No. of Seats: 2<br>Crew: 1 pilot<br>Fuel Capacity: 70 liters<br>Usable: 66.8 liters<br>Maximum Weight Take-off 550 kg<br>Zero Fuel 550 kg<br>Landing 550 kg<br>Aeroplanes with modification n. MOD92/41,<br>or equivalent Service Bulletin n. SB011-CS, installed<br>Take-off 600 kg<br>Zero Fuel 600 kg<br>Landing 600 kg |
| *2.* Lista de Chequeo De Conformidad Código De Aeronavegabilidad *(Compliance Check List airworthiness code):* | Compliance Check List - Final<br>1st Edition March 29th, 2004; Revision 0 |
| *3.* Lista Maestra de Planos *(Master Drawing List or Type Build Standard (TBS)):* | Distinta Disegni Report 92/59 Issue 1<br>Edizione 1 del: 18 Dicembre 2001, Revisione 0 |
| *4.* NIVELES EQUIVALENTES DE SEGURIDAD (*Elos*, *Special Conditions Exceptions, CRI´s*): | None. |
| *5.* Plano en tres vistas del conjunto (impreso o copia) *(views assembly drawing (Printed or blueprint)):* | Ver APENDICE 2 - ADJUNTOS<br>See APPENDIX 2 - ATTACHMENTS |

| | |
|---|---|
| *6.* Planos de Configuración Interior *(Interior configuration Drawings (LOPA):* | Description and General Characteristics Aircraft P92JS, Doc No. 92/49.<br>Issue No. 3, May 25th 2010; Revision No. 0. |
| *7.* Manual De Operación De La Aeronave (*Aircraft Operacional Manuals):* | Flight Manual, Doc. No. 92/61.<br>Issue December, 2000; Revision 3 March 2001. |
| *8.* Manual de Reparaciones Estructurales, Manual de Cableado *(Structural Repair Manual, Wiring Manual):* | Included in the Maintenance Manual, Doc No. 92/58.<br>Ed. 4 Issue May 2010; Revision 4 21th June 2012 |
| *9.* MANUAL DE MANTENIMIENTO *(Maintenance Manual):* | Maintenance Manual, Doc No. 92/58.<br>Ed. 4 Issue May 2010; Revision 4 21th June 2012Revision 4th December 2008 |
| *10.* CATALOGO ILUSTRADO DE PARTES *(Illustrated Parts Catalogue):* | Illustrated Parts Catalogue, Doc. Num. 92/65 Ed.2 Rev.0 July 2010. |
| *11.* BOLETINES DE SERVICIO, *(Service Bulletins):* | SB 001 - CS - Seat rail stops - ENG - ed1r0<br>SB 004 - CS - Gear bolts substitution - ed1r1<br>SB 005 - CS Hose brake system- ENG - ed1r0<br>SB 006 - CS Fin's inspection- ENG - ed1r0<br>SB 016 - CS - Installazione ADF Bendix King - ITA - ed1r1<br>SB 018 - CS - Rudder pedal inspection - ed1r0<br>SB 050 - CS - P92JS Cabin truss inspection for corrosion damage - ed1r0<br>SB 060 - CS - P92JS AMM new revision - ed1r0<br>SB 062 - CS - P92JS AMM new revision - ed1r0<br>SB 063 - CS - P92JS & P2002JF Carburetors heat control change for central throttle lever - ed1r1<br>SB 066 - CS - Main landing gear nuts substitution - ed2r1 |
| *12.* DIRECTIVAS DE AERONAVEGABILIDAD *(Airworthiness Directives):* | EASA_AD_2006-0234<br>EASA_AD_2011-0092_1<br>EASA_AD_2012-0113_1 |
| *13.* CERTIFICACION DE RUIDO *(*Noise *Compliance):* | ICAO /Annex 16, Vol. I. 3rd Ed. 1993, Chapter 10. Type Certificate Data Sheet for Noise TCDSN EASA.A.412, Issue 3, Dated 04 October 2012.<br>Noise Certification Test under ICAO Annex 16 and JAR 36, Report No. NOVO-11-01 for P92JS Aircraft, Dated December 14, 2001; Revision 0. |
| *14.* OTROS (*Others RVSM):* | Not applicable. |
| *15.* BASES DE CERTIFICACIÓN (*Certification Bases*) : | This type of aircraft has been approved by EASA/ENAC in accordance with JAR-VLA of April 26 1990 with amendments 91/1 and 92/1. |

## APENDICE 2 - ADJUNTOS *(APPENDIX 2 - ATTACHMENTS)*

Los siguientes documentos son adjuntos de este informe:
*The following documents are attached to this report:*

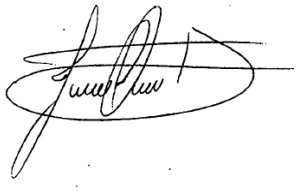
☒ Copia del Certificado Tipo de EASA, Numero A.412.
*Copy of EASA Type Certificate Number A.412.*

☒ Copia de la Hoja de Datos del Certificado Tipo para el motor de EASA Numero E.121 (Rotax 912 Series Engine).
*Copy of EASA Engine Type Certificate, Number E.121 (Rotax 912 Series Engine).*

☒ Copia del Certificado Tipo para la hélice de LBA Numero 32.110/1 (Hoffman HO17GHM A 174 177C).
*Copy of EASA Propeller Type Certificate, Number 32.110/1 (Hoffman HO17GHM A 174 177C).*

☒ Otros *(Others)*: Airplane Drawing Three Views.

**Firmas *(Signatures)***



…….....
Jose Orlando Daza Cifuentes
Inspector de Seguridad Aérea
Air Safety Inspector
(*UAEAC - Technical Group Engineer*)

…….....
Andrés González Ordóñez
Jefe de Grupo Técnico (A) - UAEAC
(UAEAC - *Technical Group Chief*)

Dated: December 28th, 2012

European Aviation Safety Agency

# TYPE CERTIFICATE

# EASA.A.412

This Type Certificate is issued by EASA, acting in accordance with Regulation (EC) No. 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation and in accordance with Commission Regulation (EC) No. 1702/2003 to

## COSTRUZIONI AERONAUTICHE TECNAM S.R.L.

**Via Tasso, 478**
**80127 Napoli**
**Italy**

and certifies that the product type design listed below complies with the applicable Type Certification Basis and environmental protection requirements when operated within the conditions and limitations specified on the associated:

**Type Certification Data Sheet Number: EASA.A.412**

## Type
## TECNAM P92

**Models**

P92-J

P92-JS

This Certificate and its associated Type Certificate Data Sheet, which is part thereof, shall remain valid unless otherwise surrendered or revoked.

**For the European Aviation Safety Agency,**

**Date of issue: 11.06.2010**

**Roger Hardy**
**Certification Manager**
**General Aviation Section**

# European Aviation Safety Agency

## EASA

## TYPE-CERTIFICATE DATA SHEET

Number : E.121
Issue : 03
Date : 26 February 2010
Type : BRP – Powertrain GmbH & Co KG
Rotax 912 series engines

Models

Rotax 912 A1
Rotax 912 A2
Rotax 912 A3
Rotax 912 A4
Rotax 912 F2
Rotax 912 F3
Rotax 912 F4
Rotax 912 S2
Rotax 912 S3
Rotax 912 S4

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BUNDESREPUBLIK DEUTSCHLAND

LUFTFAHRT-BUNDESAMT

# MUSTERZULASSUNGSSCHEIN

Type Certificate

**Nr.:** 32.110/1

Das nachstehend bezeichnete Luftfahrtgerät ist als Muster zugelassen auf Antrag von:

Hoffmann GmbH & Co. KG,
8200 Rosenheim 2

Dieser Musterzulassungsschein ist auf Grund der die Musterzulassung betreffenden Bestimmungen des Luftverkehrsgesetzes und der Luftverkehrs-Zulassungs-Ordnung in der am Tage der Ausstellung geltenden Fassung erteilt.

Die Musterzulassung gilt gemäß zugehörigem Geräte-Kennblatt-Nr.: 32.110/1

Bezeichnung des Gerätemusters: HO

Geräteart: Propeller

Die Musterzulassung kann in den in § 4 Abs. 2 der Luftverkehrs-Zulassungs-Ordnung vorgesehenen Fällen widerrufen werden.

On application of and in accordance with the German Certification Regulations as in force to day for the following product the Type Certificate is issued.
The Type Certificate Data Sheet No. is part of the Type Certificate.
The type certification may be revoked by the LBA in cases provided in the German Certification Regulations.

Datum der Ausstellung
Date of issue

Braunschweig, 09. April 1990

LUFTFAHRT-BUNDESAMT BRAUNSCHWEIG

Unterschrift
Signature

(Küppers)

**Airplane Drawing Three Views.**