



Boletim Especial de Aeronavegabilidade (*Special Airworthiness Bulletin*)

ATA: Not applicable.

BEA N° 2023-02

Date: March 31st, 2022

Subject: Structural Inspections

Introduction

This Special Airworthiness Bulletin (BEA) is intended to alert owners and operators of Seamax model M-22 light sport aircraft about inspections on the wings and fuselage.

Manufacturer: Seamax Aircraft Ltda.

Affected Aeronautic Product: Model M-22 airplanes

Background

On October 6th, 2021, a Seamax M-22 aircraft had a fatal accident with loss of the right wing over a flight close to East Hampton, USA. During investigations it was verified that the nut which attaches the bolt on the wing strut was not placed on its intended location at the moment of the accident. The accident is under investigation by the NTSB.

The manufacturer had already issued two service bulletins with instructions for inspection of the attaching points of the wings. The service bulletin SB_001_09 dated February 3rd, 2009, provides instructions for an immediate visual inspection of the bolts which attach the struts on the wings and fuselage. The service bulletin SB_001_20 dated May 14th, 2020, provides instructions for repetitive inspections of the stainless-steel connection of wing strut to fuselage to be accomplished during pre-flight inspections, for foldable wings aircraft. On February 23rd, 2023, the manufacturer issued the Safety Alert SA_001_23 with instructions for the accomplishment of an immediate inspection on the attaching points of the struts of both wings for M-22 aircraft with foldable wings.

On February 14th, 2021, another Seamax M-22 aircraft had an accident close to Vigevano, Italy. According to investigations of the Italian authority for civil aviation investigations (ANSV), a separation of the right wing had occurred due to fracture of the aluminum tube located inside the fuselage, where wing struts fittings are attached, possibly initiated by corrosion.

In order to prevent similar occurrences, the manufacturer issued the Safety Alert SA_002_23 dated February 24th, 2023, with instructions for inspections of the aluminum tube located inside the section 3 of the fuselage, which is used to attach the wing struts, regarding corrosion and cracks, initially at 300 flight hours and repetitively at 100 flight hours.

Recommendation

ANAC alerts the owners and operators of the aircraft affected by this BEA that a safety alert issued by a light sport aircraft manufacturer, according to ASTM F3198-18 standard, has the same meaning of a safety directive, and also the same objective, which is to correct an unsafe condition identified by the manufacturer.

Therefore, ANAC reinforces that the safety alerts below shall be treated as safety directives and, as being so, their instructions shall be considered mandatory for owners or operators, according to RBAC 91.327(b)(4):

- 1) Safety Alert Seamax SA_001_23, dated February 23rd, 2023, for M-22 model aircraft, foldable wings version.
- 2) Safety Alert Seamax SA_002_23, dated February 24th, 2023, for M-22 model aircraft, all versions.

ANAC also reiterates the importance of attending the pilot operating handbook of the aircraft regarding pre-flight check and recommends the accomplishment of Service Bulletin Seamax SB_001_20 “Visual Inspection on Bottom Wing Strut fitting ends”, dated May 14th, 2020, for model M-22 aircraft, foldable wings version, and Service Bulletin Seamax SB_001_09, dated February 3rd, 2009, which covers the inspection of the attachment bolts of the wing struts for all versions of model M-22 aircraft.

For additional information, contact

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