

**SIGURNOSNI NALOG**

**BROJ: 2013/009 rev 02**

**SAFETY ORDER**

**NUMBER: 2013/009 rev 02**



CRNA GORA  
AGENCIJA ZA CIVILNO VAZDUHOPLOVSTVO

**Naslov: Sigurnosni nalog kojim se utvrđuju zahtjevi vezani za preglede vazduhoplova i vazduhoplovnih komponenti i njihovih resursa ograničenja rokova upotrebe /**

*Title: Safety order determining the requirements related to assessments of aircraft and components and resources thereof time limits*

**Na inicijativu: Agencija za civilno vazduhoplovstvo Crne Gore (u daljem tekstu: Agencija) /**

*Initiated by: The Civil Aviation Agency of Montenegro (hereinafter: the CAA)*

Na osnovu člana 6, stav 1 tačka 10, a u vezi sa čl. 78 i 80 Zakona o vazдушnom saobraćaju ("Službeni list CG", broj 30/12), Agencija za civilno vazduhoplovstvo, donijela je:

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**Referentni propisi:**

Zakon o vazдушnom saobraćaju („Službeni list CG“, br. 30/12), čl. 78 i 80.

**Referentna dokumenta:**

Pravilnik o obezbjeđivanju kontinuirane plovidbenosti vazduhoplova i drugih vazduhoplovnih proizvoda, djelova i uređaja i o odobravanju vazduhoplovno-tehničkih organizacija i osoblja koje se bave ovim poslovima (Sl.l. CG br. 37/12 i br. 47/12).

**Svrha:**

Ovaj nalog za zaštitu sigurnosti donosi se radi unapređenja procedura, načina rada i kvaliteta održavanja vazduhoplova, kao i ujednačavanja prakse izrade priručnika koji se koriste u održavanju vazduhoplova.

Agencija ovim sigurnosnim nalogom utvrđuje dodatne radove održavanja vazduhoplova i vazduhoplovnih komponenti (uključujući i motore), njihove intervale i standarde, ukoliko je primjenljivo,

In accordance with the Article 6, paragraph 1, point 10, in conjunction with Articles 78 and 80 of the Law on Air Transport ("Official Gazette of Montenegro", No. 30/12), the Civil Aviation Agency, issued:

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**Regulation Reference:**

The Law on Air Transport ("Official Gazette of Montenegro", No. 30/12), Articles 78 and 80

**Guidance Material Reference:**

Commission Regulation on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks ("Official Gazette of Montenegro", No. 37/12 and 47/12).

**Purpose:**

This safety order is issued for the purpose of improvement of procedures, way of work and quality, aircraft maintenance, as well as harmonization of practice regarding the preparation of manuals used in aircraft maintenance.

The CAA uses this safety order for the purpose of determining additional works of maintenance of aircraft and components (including engines), their intervals and standards, as applicable, related to the aircraft

koji se odnose na plovidbenost vazduhoplova, a koji nijesu navedeni u dokumentaciji njihovog proizvođača, s tim da se vodi računa o preporuci proizvođača (ako postoji u pogledu tih radova).

### 1. Opšte uputstvo

a) Svaki Program tehničkog održavanja mora tačno da definiše koji poslovi se smatraju baznim održavanjem.

b) Vlasnikov/Operatorov Program tehničkog održavanja vazduhoplova treba da sadrži dodatne zahtjeve za održavanje.

Dodatni zahtjevi vezani za održavanje su:

1) Za određivanje vremena između dvije obnove (TBO) motora / agregata (starter, alternator, karburator, magneti, vakuum pumpa, itd.) i elise, vlasnik / operator mora da primjenjuje preporuke proizvođača motora / agregata kao što su servisni bilteni (SBs) servisna pisma (SLs), informativna servisna pisma (SILs) ili slični dokumenti na koje se priručnik za održavanje ili priručnik za planiranje održavanja pozivaju, pri čemu vlasnik / operator može da odstupa od preporuka proizvođača ali uz prethodno sačinjenu izjavu u Programu tehničkog održavanja vazduhoplova, koja tačno definiše odnos vlasnika / operatora vazduhoplova prema preporukama proizvođača (SBs, SLs, SILs...).

2) Provjera pito-statičkog sistema na pojavu gubitka fluida (curenje) – svaka 24 mjeseca i to:

- Provjera pito-statičkog sistema se ispituje u skladu sa EASA CS 22.1325, EASA CS 23.1325, EASA CS 25.1325, EASA CS 27.1325 ili EASA CS 29.1325 zavisno od toga koji je CS primjenjiv;

- Postupak provjere pito-statičkog sistema na pojavu gubitka fluida (curenje) se vrši na sledeće načine:

a) Pito-statički sistem se stavlja pod pritisak na približno od 3.4 kPa ("25,4 mm živinog stuba ili 140 čvorova"). Bez daljeg dodavanja pritiska ne smije biti gubitak pritiska u periodu od 10 sekundi;

b) Staviti pod pritisak pito-statički sistem tako da pokazivač brzine vazduhoplova pokazuje otprilike normalnu brzinu krstarenja. Nakon jednog minuta potvrditi da pokazivač brzine ne pokazuje manju brzinu.

airworthiness, which are not contained in documentation of their manufacturer, while having regard to the recommendation of the manufacturer (if there is one regarding the works).

### 1. General instruction

a) Every technical maintenance programme shall accurately define which tasks are included in "base" maintenance.

b) Aircraft Technical Maintenance Programme of the Owner/Operator should contain additional requirements related to maintenance.

Additional requirements related to maintenance are:

1) For determining Time Between Overhauls (TBO) of the engine / generator (starter, alternator, carburettor, magnets, vacuum pump, etc.) and of the propeller, the owner / operator shall apply recommendations of engine manufacturer such as Service Bulletins (SBs), Service Letters (SLs), Service Information Letters (SILs) or similar documents invoked by Maintenance Manual or Maintenance Schedule, where the owner/operator may deviate from manufacturer's recommendations in case there is a previously prepared statement in aircraft technical maintenance programme, that accurately defines the position of aircraft owner/operator regarding the manufacturer's recommendations (SBs, SLs, SILs...).

2) Pitot-static test in case of leakage – every 24 months, namely:

- Pitot-static test shall be performed in accordance with EASA CS 22.1325, EASA CS 23.1325, EASA CS 25.1325, EASA CS 27.1325 or EASA CS 29.1325, depending on which CS is applicable;

- The procedure of pitot-static test in case of leakage is performed as follows:

a) A pressure of approximately 3.4 kPa ("1 inch of mercury or 140 knots") shall be applied to the pitot-static system. Without additional pumping for a period of 10 seconds there shall be no decrease in this pressure;

b) A pressure shall be applied to the pitot-static system so the aircraft speed indicator indicates approximately normal cruising speed. After one minute, it should be verified that the speed indicator doesn't indicate lower speed.

***Napomena:*** *Gubitak pritiska u pito-statičkom sistemu može se tolerisati ukoliko je propisan od proizvođača.*

**3)** Kalibracija visinomjera – svaka 24 mjeseca i to po primjenljivom standardu: FAR 43, Dodatak E;

**4)** Kalibracija brzinomjera – svaka 24 mjeseca i to po primjenljivim standardima: ETSO C2d ili ETSO C46a;

**5)** Kalibracija pokazivača vertikalne brzine – svaka 24 mjeseca i to po primjenljivom standardu: ETSO C8e;

**6)** Kalibracija magnetnog kompasa – po preporukama proizvođača ili svaka 24 mjeseca, a može i ranije ako su se na vazduhoplovu obavljale instalacije instrumenata koji bi na neki način ugrozili tačnost kompasa. Kalibracija kompasa se obavlja po primjenljivim standardima: EASA CS 22.1327, EASA CS 23.1327, EASA CS 25.1327, EASA CS 27.1327 ili EASA CS 29.1327 zavisno od toga koji je CS primjenljiv;

**7)** Kalibracija transpondera – svaka 24 mjeseca i to po primjenljivom standardu: FAR 43, Dodatak F;

**8)** ELT - po preporukama proizvođača ili provjera roka važenja baterije i dovoljne jačine signala odaslanog sa antene, svakih 12 mjeseci;

**9)** Prsluci za spasavanje – po preporukama proizvođača ili ih zamijeniti na svakih 12 mjeseci;

**10)** Pojasevi za vezanje u kabini i kokpitu – po preporukama proizvođača ili detaljna vizuelna inspekcija svakih 6 mjeseci, zatim zamjena nakon 10 godina;

**11)** Boce pod pritiskom punjene kiseonikom/azotom moraju biti servisirane i testirane u skladu sa preporukama proizvođača. Ukoliko nema takvih preporuka, boca će se servisirati ili testirati u skladu sa crnogorskim standardima koje propisuje Institut za standardizaciju Crne Gore – ISME;

***Notification:*** *The pressure lost in pitot-static system may be tolerated if prescribed by the manufacturer.*

**3)** Calibration of the altimeter – every 24 months in accordance with the applicable standard: FAR 43, Appendix E;

**4)** Calibration of airspeed indicator – every 24 months in accordance with the applicable standards: ETSO C2d or ETSO C46a;

**5)** Calibration of variometer (VSI) - every 24 months in accordance with the applicable standard: ETSO cC8e;

**6)** Calibration of magnetic compass – according to the manufacturer's recommendations or every 24 months, and possibly earlier if the aircraft experienced installation of instruments that would somehow undermine the compass accuracy. The compass calibration is performed in accordance with the applicable standards: EASA CS 22.1327, EASA CS 23.1327, EASA CS 25.1327, EASA CS 27.1327 or EASA CS 29.1327, depending on which CS is applicable;

**7)** Calibration of transponder – every 24 months in accordance with the applicable standard: FAR 43, Appendix F;

**8)** ELT – according to the manufacturer's recommendations or assessment of battery lifetime and sufficient strength of signal emitted from the antenna, every 12 months;

**9)** Life vests – according to the manufacturer's recommendations, or shall be replaced every 12 months;

**10)** Seat belts and restraining belts in cabin and cockpit – according to the manufacturer's recommendations or detailed visual inspection every 6 months, and the replacement after 10 years;

**11)** Oxygen/nitrogen bottles shall be serviced and tested according to the manufacturer's recommendations. In case there are no such recommendations, the bottle shall be serviced in accordance with Montenegrin standards prescribed by the Institute for Standardization of Montenegro – ISME;

<p><b>12)</b> Vaganje vazduhoplova koji se ne koriste za komercijalni vazdušni prevoz će se obavljati po preporukama proizvođača. Ukoliko nema takvih preporuka ovakvi vazduhoplovi će se vagati poslije izvršenog farbanja, modifikacija i većih radova obavljenih na vazduhoplovu;</p> <p><b>13)</b> Vaganje aparata za gašenje požara u kabini i kokpitu na svakih 12 mjeseci;</p> <p><b>14)</b> Hidrostatički test aparata za gašenje požara će se obavljati po preporukama proizvođača ili ukoliko nema takvih preporuka na svakih 60 mjeseci;</p> <p><b>15)</b> Provjera kompletnosti i rokova trajanja sadržaja kutije za prvu pomoć će se obavljati svakih 12 mjeseci;</p> <p><b>16)</b> Gipka crijeva u prostoru motora:  - Obnova, inspekcija i zamjena gumenih crijeva vrše se po preporukama proizvođača. Ukoliko nema takvih preporuka zamjena crijeva se vrši nakon 5 godina od njihove instalacije;  - Inspekcija i zamjena teflonskih crijeva vrše se po preporukama proizvođača. Ukoliko nema takvih preporuka zamjena crijeva se vrši nakon 10 godina od njihove instalacije.</p> <p><b>17)</b> Obnova, inspekcija i zamjena gipkih crijeva u trupu vazduhoplova se vrše po preporukama proizvođača. Ukoliko nema takvih preporuka zamjena crijeva se vrši nakon 10 godina od njihove instalacije;</p> <p><b>18)</b> Obnova, inspekcija i zamjena crijeva vakuum sistema se vrše po preporukama proizvođača. Ukoliko nema takvih preporuka zamjena crijeva se vrši nakon 10 godina od njihove instalacije;</p> <p><b>19)</b> Provjera kapaciteta baterije se vrši po preporukama proizvođača. Ukoliko nema takvih preporuka rok za provjeru kapacitivnosti ne smije biti duži od 3 mjeseca kod olovne baterije i 4 mjeseca za Nikl-kadmijum akumulatore.</p>	<p><b>12)</b> Weighting of aircraft not used for commercial air transport shall be performed according to the manufacturer's recommendations. In case there are no such recommendations, such aircrafts shall be weighted after the painting, modifications and substantial works performed at the aircraft;</p> <p><b>13)</b> Weighting of the fire extinguishers in the cabin and cockpit shall be performed every 12 months;</p> <p><b>14)</b> Hydrostatic test of the fire extinguisher shall be performed according to the manufacturer's recommendations or in case there are no such recommendations, it shall be performed every 60 months;</p> <p><b>15)</b> Verifying that the first aid kit is complete and is up to date shall be performed every 12 months;</p> <p><b>16)</b> Flexible hoses in the engine area:  - Overhaul, inspection and replacement of rubber hoses are performed in accordance with the manufacturer's recommendations. In case there are no such recommendations, the hoses replacement shall be performed 5 years after their installation;  - Inspection and replacement of teflon hoses shall be performed in accordance with the manufacturer's recommendations. In case there are no such recommendations, the hoses replacement shall be performed 10 years after their installation.</p> <p><b>17)</b> Overhaul, inspection and replacement of flexible hoses in the airframe shall be performed according to the manufacturer's recommendations. In case there are no such recommendations, the hoses replacement shall be performed 10 years after their installation;</p> <p><b>18)</b> Overhaul, inspection and replacement of vacuum hoses shall be performed according to the manufacturer's recommendations. In case there are no such recommendations, the hoses replacement shall be performed 10 years after their installation;</p> <p><b>19)</b> Assessment of the battery capacity shall be performed according to the manufacturer's recommendations. In case there are no such recommendations, the time period for capacity assessment shall be no more than 3 months for lead-</p>
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<p>Za (VFR) vazduhoplove, čija je MTOM &lt; 1200 kg, rok za provjeru kapacitivnosti baterije ne smije biti duži od 12 mjeseci;</p> <p><b>20)</b> Pregledi izlaza / otvora u slučaju opasnosti se obavljaju po preporukama proizvođača. Ukoliko nema takvih preporuka operativni pregled se vrši svakih 6 mjeseci;</p> <p><b>21)</b> Postupak u slučaju dužeg stajanja klipnog motora vazduhoplova zavisi od preporuke proizvođača, a ako nema preporuke proizvođača, startovanje motora do postizanja radne temperature ulja u motoru je obavezno jednom u 30 dana;</p> <p><b>22)</b> Ispravnost kuke za vuču na vazduhoplovu se provjerava svake godine, a obnova se vrši prema preporuci proizvođača ili nakon ne više od 2000 lansiranja (<i>take-off</i>).</p> <p><b>2. Prelazne odredbe</b></p> <p>Vlasnici / Operatori vazduhoplova dužni su da Programe održavanja svojih vazduhoplova usklade sa odredbama iz ovog sigurnosnog naloga u periodu od 12 mjeseci od dana stupanja na snagu ovog sigurnosnog naloga.</p> <p><b>3. Stupanje na snagu</b></p> <p>Ovaj sigurnosni nalog stupa na snagu danom donošenja i objavljuje se na internet stranici Agencije.</p>	<p>acid battery, and no more than 4 months for Nickel Cadmium batteries;</p> <p>For (VFR) aircraft, with MTOM less than 1200 kg, the period for battery capacity check shall not exceed 12 months;</p> <p><b>20)</b> Inspections of emergency exits shall be performed according to the manufacturer's recommendations. In case there are no such recommendations, the operative inspection shall be performed every 6 months;</p> <p><b>21)</b> The procedure to be followed in case of long parking period of aircraft piston engine shall depend on the manufacturer's recommendation, and if there is none, the engine shall be started up to achieving operating temperature of engine oil once in thirty days.</p> <p><b>22)</b> Serviceability of the aircraft towing hook shall be assessed once a year, and the overhaul shall be performed according to a manufacturer's recommendation or after no more than 2.000 take-offs.</p> <p><b>2. Transitional Provisions</b></p> <p>Aircraft owners/operators shall align their aircraft maintenance programmes with provisions of this Safety Order within 12 months of entry into the force of this Safety Order.</p> <p><b>3. Entry into force</b></p> <p>This safety order shall enter into force on the day of its adoption, and it shall be published at the web page of the CAA.</p>
<p><b>Direktor / Director</b></p> <p><b>Dragan Đurović</b></p>	<p>Datum stupanja na snagu</p> <p><i>Date of entry into force</i></p>