

**SIGURNOSNI NALOG**

**BROJ: 2012/002 Rev.03**

**SAFETY ORDER**

**NUMBER: 2012/002 Rev.03**



CRNA GORA  
AGENCIJA ZA CIVILNO VAZDUHOPLOVSTVO

<b>Title:</b> <b>Aerodrome operating minima for airports Podgorica and Tivat</b>	<b>Naslov:</b> <b>Operativni minimumi za aerodrome Podgorica i Tivat</b>
<p>Pursuant to Article 6, paragraph 1, point 10 of the Law on Air Transport ("Official Gazette of Montenegro", No 30/12), the Civil Aviation Agency (hereinafter referred to as the "CAA"), hereby issues:</p> <p><b>SAFETY ORDER</b> <b>Number: 2012/002 Rev.03</b></p> <p><b>Subject:</b> Establishment of aerodrome operating minima for Podgorica and Tivat aerodromes.</p> <p><b>Initiated by:</b> The Civil Aviation Agency</p> <p><b>Regulation Reference:</b> - Law on Air Transport ("Official Gazette of Montenegro" No 30/2012), - Regulation laying down technical requirements and administrative procedures related to air operations ("Official Gazette of Montenegro", No. 31/2013); - Regulation on standards and criteria for use of manoeuvring surfaces, facilities and equipment at aerodrome ("Official Gazette of Montenegro", No. 29/2014).</p> <p><b>Reference documents:</b> ICAO Annex 14, ICAO Annex 4 and ICAO Annex 6</p> <p><b>Application:</b> This Safety Order (hereinafter referred to as the "Safety Order") is applicable to aircraft operators, aerodrome operators and meteorological service providers.</p> <p><b>Purpose and objective:</b> With this Safety Order, the CAA hereby establishes aerodrome operating minima in Montenegro, for the purpose of prevention of the aviation safety.</p> <p><b>Introduction</b> In accordance with Article 51 paragraph 2 of the Law on Air Transport, criteria and standards for use of manoeuvring surfaces, facilities and equipment at aerodrome shall be established by the act of Agency. Article 100 paragraph 1 of the Air Law on Transport lays down that the pilot in command shall operate</p>	<p>Na osnovu člana 6 stav 1 tačka 10 Zakona o vazдушnom saobraćaju („Službeni list CG“, br. 30/12), Agencija za civilno vazduhoplovstvo (u daljem tekstu: ACV) donijela je:</p> <p><b>SIGURNOSNU INFORMACIJU</b> <b>Broj: 2012/002 Rev.03</b></p> <p><b>Predmet:</b> Utvrđivanje operativnih minimuma za aerodrome Podgorica i Tivat.</p> <p><b>Na inicijativu:</b> Agencija za civilno vazduhoplovstvo</p> <p><b>Referentni propisi:</b> - Zakon o vazдушnom saobraćaju („Službeni list CG“, br. 30/12), - Pravilnik o tehničkim zahtjevima i administrativnim procedurama za obavljanje operacija vazdušnog prevoza („Službeni list CG“, br. 31/2013); - Pravilnik o standardima i kriterijumima za nesmetanu upotrebu operativnih površina, objekata, uređaja i opreme na aerodromu („Službeni list CG“, br. 29/2014).</p> <p><b>Referentna dokumenta:</b> ICAO Aneks 14, ICAO Aneks 4 i ICAO Aneks 6</p> <p><b>Primjena:</b> Ovaj Sigurnosni nalog (u daljem tekstu: Sigurnosni nalog) odnosi se na operatore vazduhoplova, operatore aerodroma i pružaoce usluga vazduhoplovne meteorologije.</p> <p><b>Namjena i cilj:</b> ACV ovim nalogom utvrđuje operativne minimume za upotrebu aerodroma u Crnoj Gori, u cilju zaštite sigurnosti vazdušnog saobraćaja.</p> <p><b>Uvod</b> U skladu sa članom 51 stav 2 Zakona o vazдушnom saobraćaju, kriterijumi i standardi za nesmetanu upotrebu operativnih površina, objekata, uređaja i opreme na aerodromu utvrđuju se aktom Agencije. Članom 100 stav 1 Zakona o vazдушnom saobraćaju propisano je da je vođa vazduhoplova dužan da obavlja</p>



aircraft in accordance with rules and procedures, while deviation from them is acceptable only in an emergency due to the safety of aircraft or persons on board.

Lack of aerodrome operating minima in Montenegro in the previous period is acknowledged. This has been especially noted in aircraft operations at Podgorica and Tivat aerodromes. Taking this issue in consideration the Agency, along with the assistance of foreign experts, stated that:

aerodrome operating minima must be established, because they are mandatory or recommended in accordance with international regulations and documents which are applicable in Montenegro, and particularly in accordance with:

- Regulation laying down technical requirements and administrative procedures related to air operations ("Official Gazette of Montenegro", No 31/2013);
- CAT.OP.MPA.110, SPA.LVO.100
- Regulation on standards and criteria for use of manoeuvring surfaces, facilities and equipment at aerodrome ("Official Gazette of Montenegro", No 29/2014)
- ICAO Annexes 4, 6 and 14;

and supporting documents.

Aerodrome operating minima shall be established by the aviation authorities, namely the CAA.

As aerodrome operating minima are not established at the aerodromes in Montenegro, aviation safety may be endangered due to the adverse weather conditions.

Aerodrome operating minima depend on:

- equipment level at the aerodrome and with the air traffic control,
- reliability and availability of the equipment, systems and devices,
- providing qualified personnel for all aerodrome services and air traffic control, as well as their specialized training, and
- establishment of operating working procedures at aerodromes.

#### **Aerodrome operating minima at Tivat and Podgorica aerodromes**

Taking into consideration above mentioned statements, the CAA shall establish following aerodrome operating minima for operations conducted at Podgorica and Tivat aerodrome.

let vazduhoplova u skladu sa propisanim pravilima i procedurama, od kojih može da odstupa samo u krajnjoj nuždi zbog sigurnosti vazduhoplova ili lica u vazduhoplovu.

U proteklom periodu konstatovano je nepostojanje operativnih minimuma za upotrebu aerodroma u Crnoj Gori. Ovo je posebno istaknuto pri operacijama vazduhoplova sa aerodroma Podgorica i aerodroma Tivat. U postupku razmatranja ovog pitanja Agencija je, uz učešće stranih eksperata, konstatovala da:

operativni minimumi za upotrebu aerodroma moraju da postoje, jer su obavezni ili preporučeni u skladu sa međunarodnim propisima i dokumentima koje primjenjuje Crna Gora, a posebno u skladu sa:

- Pravilnikom o tehničkim zahtjevima i administrativnim procedurama za obavljanje operacija vazdušnog prevoza („Službeni list CG“, br. 31/2013);
- CAT.OP.MPA.110, SPA.LVO.100
- Pravilnikom o standardima i kriterijumima za nesmetanu upotrebu operativnih površina, objekata, uređaja i opreme na aerodromu („Službeni list CG“, br. 29/2014);
- ICAO Aneksima 4, 6 i 14;

i pratećim dokumentima.

Operativne minimume aerodroma utvrđuje vazduhoplovna vlast, odnosno ACV.

Kako na aerodromima Crne Gore nijesu definisani operativni minimumi za upotrebu aerodroma, sigurnost vazdušnog saobraćaja može da bude ugrožena pri nepovoljnim meteorološkim uslovima.

Operativni minimumi aerodroma zavise od:

- opremljenosti aerodroma i kontrole letenja tehničkim sredstvima,
- pouzdanosti i raspoloživosti opreme, sistema i uređaja,
- obezbjeđivanja stručnog kadra za sve službe aerodroma i kontrole letenja kao i njihove posebne obuke, i
- uspostavljanja operativnih procedura rada na aerodromu.

#### **Operativni minimumi na aerodromima Tivat i Podgorica**

Uvažavajući navedene konstatacije, ACV utvrđuje sljedeće operativne minimume aerodroma za operacije na aerodromima Podgorica i Tivat.

**SIGURNOSNI NALOG**

**BROJ: 2012/002 Rev.03**

**SAFETY ORDER**

**NUMBER: 2012/002 Rev.03**



CRNA GORA  
AGENCIJA ZA CIVILNO VAZDUHOPLOVSTVO

**LANDING MINIMA**

LYPG Podgorica

<b>ILS 36 Z</b>					
STRAIGHT-IN LANDING					Circle to Land with prescribed tracks
ILS APPROACH			LOCALIZER APPROACH		
FULL	ALS out	FULL	ALS out		
A	RVR 550	RVR 1200	RVR 1000	RVR 1300	1800
B			RVR 1200		2400
C					3600
D					
<b>ILS 36 Y</b>					
STRAIGHT-IN LANDING					Circle to Land with prescribed tracks
ILS APPROACH			LOCALIZER APPROACH		
FULL	ALS out	FULL	ALS out		
A					1800
B					2400
C	RVR 550	RVR 1200	RVR 1200	RVR 1300	3600
D					
<b>VOR DME Z RWY 36</b>					
STRAIGHT-IN LANDING					Circle to Land with prescribed tracks
FULL	ALS out				
A	RVR 1100	RVR 1800			
B					2400
C	RVR 1200				3600
D					
<b>VOR DME Y RWY 36</b>					
STRAIGHT-IN LANDING					Circle to Land with prescribed tracks
FULL	ALS out				
A					
B					2400
C	RVR 1100	RVR 1800			3600
D					
<b>NDB DME Y RWY 36</b>					
STRAIGHT-IN LANDING					Circle to Land with prescribed tracks
FULL	ALS out				
A					
B					2400
C	RVR 1100	RVR 1800			3600
D					
<b>NDB DME Z RWY 36</b>					
STRAIGHT-IN LANDING					Circle to Land with prescribed tracks
FULL	ALS out				
A	RVR 1200	RVR 1900			
B					2400
C					3600
D					

**SIGURNOSNI NALOG**

**BROJ: 2012/002 Rev.03**

**SAFETY ORDER**

**NUMBER: 2012/002 Rev.03**



CRNA GORA  
AGENCIJA ZA CIVILNO VAZDUHOPLOVSTVO

**NOTES FOR PODGORICA AERODROME**

A, B, C and D represent aircraft category based on approach speeds.

Conversion of visibility into RVR must not be used in following cases

- (1) when RVR report is available;
- (2) for calculating take-off minima;
- (3) for any RVR less than 800 m.

If RVR measuring equipment is not available minimum required visibility for ILS approach is 800 m instead of 550 m RVR.

Instrument approach may commence regardless of the reported RVR/Visibility but the approach shall not be continued beyond the out marker, or equivalent position, if the RVR/visibility is less than the minima applicable for that instrument approach.

**NAPOMENE ZA AERODROM PODGORICA**

A,B,C i D predstavlja kategoriju vazduhoplova u odnosu na brzine vazduhoplova u prilazu.

Konverzija vidljivosti u RVR nije dozvoljena u sljedećim slučajevima

- (1) kada je raspoloživ RVR izvještaj,
- (2) za kalkulaciju minimuma za polijetanje,
- (3) za vrijednosti izražene u RVR manje od 800m.

Ako oprema za mjerenje RVR nije raspoloživa minimalna vrijednost vidljivosti za ILS prilaz je 800 m umjesto 550 m RVR.

Instrumentalni prilaz može da se započne bez obzira na vrijednost RVR/vidljivost ali ne smije da se nastavi dalje od out markera ili ekvivalentne pozicije ako je vrijednost RVR/vidljivosti manja od minimuma koji se primjenjuje za taj instrumentalni prilaz.

**SIGURNOSNI NALOG****SAFETY ORDER****BROJ: 2012/002 Rev.03****NUMBER: 2012/002 Rev.03**
 CRNA GORA  
 AGENCIJA ZA CIVILNO VAZDUHOPLOVSTVO

LYTV Tivat				
<b>LOC DME 32</b>				
STRAIGHT-IN LANDING				Circle to Land
FULL	ALS out	FULL	ALS out	
Min. Gradient 5% and 4.0%		Min. Gradient 2.5 % and 3.0 %		
A	4600	5000	5000	5000
B				
C				
D				
<b>NDB DME 32 (Circling) and NDB DME RWY 14 (CIRCLING)</b>				
Day		Night		
A	5000	Not authorized		
B				
C				
D				
<b>Circle To Land With Prescribed Tracks To Rwy 14</b>				
Day		Night		
A	5000	Not authorized		
B				
C				
D				

**NOTES FOR TIVAT AERODROME**

A, B, C and D represent aircraft category based on approach speeds.

Stated visibility values are official values reported by the aerodrome MET service.

Conversion of visibility into RVR is not allowed.

**NAPOMENE ZA AERODROM TIVAT**

A,B,C i D predstavlja kategoriju vazduhoplova u odnosu na brzine vazduhoplova u prilazu.

Navedene vrijednosti vidljivosti su zvanične vrijednosti koje daje meteo služba aerodroma.

Konverzija vidljivosti u RVR nije dozvoljena.

**SIGURNOSNI NALOG****SAFETY ORDER****BROJ: 2012/002 Rev.03****NUMBER: 2012/002 Rev.03**
 CRNA GORA  
 AGENCIJA ZA CIVILNO VAZDUHOPLOVSTVO

<b>MINIMUMS FOR TAKE OFF</b>	<b>MINIMUMI ZA POLIJETANJE</b>
<b>PODGORICA AERODROME</b>	<b>AERODROM PODGORICA</b>
Take off is not allowed when visibility is below values in Table 1.	Zabranjuje se polijetanje vazduhoplova kada je vidljivost ispod vrijednosti datih u Tabeli 1.

**Tabela 1 – Minimalne vrijednosti vidljivosti za polijetanje na aerodromu Podgorica**  
*(Table 1 - Minimum visibility for Take-Off on Podgorica Aerodrome)*

	Potrebna svjetla poletno stetne staze (Required runway lights)	Min VIS value
<b>Danju</b> (Day)		400
<b>Noću</b> (Night)	Ivična svjetla poletno stetne staze (Runway edge lights)	400
<b>Danju</b> (Day)	Ivična svjetla poletno stetne staze (Runway edge lights)	300 - LVO Approval required
<b>Noću</b> (Night)	Ivična svjetla i svjetla praga poletno stetne staze (Runway edge lights and threshold lights)	300 – LVO Approval required
<b>Helikopteri</b> (Helicopters)	Ivična svjetla i svjetla praga poletno stetne staze (Runway edge lights and threshold lights)	200 – LVO Approval required

<b>Note</b>	<b>Napomena</b>
The operator shall conduct LVTO with VIS value less than 400 m only when approved by the CAA.	Operator može vršiti polijetanje pri vidljivosti manjoj od 400 m samo ako ima odobrenje od ACV-a.
The reported visibility value referred to in the initial part of take-off can be replaced by pilot assessment.	Vrijednost vidljivosti iz izvještaja na početku polijetanja može da bude zamijenjena procjenom pilota.
Activation of standby source of electrical power must be in 1 second or less for visibility value less than 400 m.	Aktiviranje rezervnog izvora napajanja elektricne enegrije mora biti u roku od 1 sekunde ili manje za vidljivost manju od 400 m.

<b>TIVAT AERODROME</b>	<b>AERODROM TIVAT</b>
Take off for aeroplanes is forbidden when visibility is less than 400 m. Take off for helicopters is not allowed when visibility is below values in Table 2.	Zabranjuje se polijetanje aviona kada je vidljivost manja od 400 m. Zabranjuje se polijetanje helikoptera kada je vidljivost ispod vrijednosti datih u Tabeli 2.

**Tabela 2 – Minimalne vrijednosti vidljivosti za polijetanje na aerodromu Tivat**  
*(Table 2 - Minimum visibility for Take-Off on Tivat Aerodrome)*

	Potrebna svjetla poletno stetne staze (Required runway lights)	Min VIS value
<b>Helikopteri</b> (Helicopters)	Ivična svjetla i svjetla praga poletno stetne staze (Runway edge lights and threshold lights)	200 – LVO Approval required



<p><b>NOTES:</b></p> <p>Any deviation from the requirements of this Safety Order and restrictions in Paragraph 2 stated below shall be considered as endangering of aviation safety. In accordance with Article 129 of the Law on Air Transport, every legal entity or natural person which while performing its duties took part or has knowledge about events endangering the aviation safety, shall with no delay, and within the period of 72 hours, notify the Agency and National Commission Accident and Serious Incident Investigation thereof.</p> <ol style="list-style-type: none"> <li>1) Pilot in Command is authorised to perform the assessment of RVR / visibility for runway used for take-off immediately before take-off on the Line-Up position and determine is it equal or better of the required minimum.</li> <li>2) During operations in prevailing visibility of less than 800 m       <ol style="list-style-type: none"> <li>2.1) Movement of only one aircraft on the aerodrome manoeuvring areas shall be allowed;</li> <li>2.2) Movement of only FOLLOW ME vehicles, firefighting and emergency services vehicles on manoeuvring areas whose use is prescribed for emergency procedures shall be allowed;</li> <li>2.3) Aerodrome Operator and Air Traffic Control shall be responsible for enforcement of restrictions listed in 2.1 and 2.2.</li> </ol> </li> <li>3) Before introduction of take-off operations, in prevailing visibility less than 800 m, the aerodrome operator shall verify the fulfilment of criteria referred to in point 2, and inform all aerodrome traffic participants about introduction of take-off operations in low visibility conditions.</li> </ol>	<p><b>NAPOMENE:</b></p> <p>Svako odstupanje od zahtjeva ovog naloga i zabrana iz tačke 2 koji su navedeni dolje smatra se ugrožavanjem sigurnosti vazdušnog saobraćaja. U skladu sa članom 129 Zakona o vazdušnom saobraćaju, svako pravno ili fizičko lice koje je u obavljanju poslova iz svoje nadležnosti učestvovalo ili saznalo za događaje koji ugrožavaju sigurnost dužno je da o tome, bez odlaganja, a najkasnije u roku od 72 sata od saznanja, obavijesti Agenciju i Nacionalnu Komisiju za istraživanje nesreća i ozbiljnih nezgoda vazduhoplova</p> <ol style="list-style-type: none"> <li>1) Vođa vazduhoplova ima pravo da izvrši procjenu da li je RVR / vidljivost za poletno sletnu stazu sa koje polijeće neposredno prije polijetanja na poziciji Line-Up i utvrdi da li je ta procijenjena vrijednost jednaka ili veća od propisanog minimuma.</li> <li>2) Za vrijeme operacija u uslovima kada je preovladavajuća vidljivost manja od 800 metara:       <ol style="list-style-type: none"> <li>2.1) Dozvoljeno je kretanje samo jednog vazduhoplova po operativnim površinama;</li> <li>2.2) Po operativnim površinama aerodroma je dozvoljeno kretanje samo vozila za predvođenje vazduhoplova FOLLOW ME, vatrogasnih vozila i vozila čija je upotreba predviđena za postupke prilikom vanrednih situacija;</li> <li>2.3) Za realizaciju zabrana iz podtač. 2.1 i 2.2 ove tačke nadležni su operator aerodroma i nadležna kontrola letenja.</li> </ol> </li> <li>3) Prije uvođenja operacija polijetanja, u uslovima kada je preovlađujuća vidljivost ispod 800 m, operator aerodroma je dužan da provjeri zadovoljenje uslova iz tačke 2 kao i da o uvođenju operacija u uslovima smanjene vidljivosti obavjesti sve učesnike u saobraćaju na aerodromu.</li> </ol>
<p><b>Entry into Force</b> This Safety Order shall apply from 08 January 2015, and shall be published at the CAA web site.</p>	<p><b>Stupanje na snagu</b> Ovaj sigurnosni nalog primjenjuje se od 08.01.2015 godine, a objaviće se na internet stranici ACV-a.</p>
<p><b>Direktor / Director</b> <b>Dragan Đurović</b></p>	<p><b>Datum / Date</b></p>