



BERITA NEGARA REPUBLIK INDONESIA

No. 304, 2015

KEMENHUB. Keselamatan Penerbangan Sipil.
Bagian 34 Amandemen 1. Persyaratan. Bahan
Bakar Terbuang. Emisi Gas Buang. Peawat
Udara. Mesin Turbin. Peraturan. Perubahan.

PERATURAN MENTERI PERHUBUNGAN REPUBLIK INDONESIA NOMOR PM 49 TAHUN 2015 TENTANG

PERUBAHAN ATAS PERATURAN MENTERI PERHUBUNGAN NOMOR
KM 28 TAHUN 2009 TENTANG PERATURAN KESELAMATAN
PENERBANGAN SIPIL BAGIAN 34 AMANDEMEN 1 (*CIVIL AVIATION
SAFETY REGULATIONS PART 34 AMENDMENT 1*) TENTANG
PERSYARATAN BAHAN BAKAR TERBUANG DAN EMISI GAS BUANG
UNTUK PESAWAT UDARA YANG DIGERAKKAN DENGAN MESIN TURBIN
(*FUEL VENTING AND EXHAUSE EMISSION REQUIREMENT FOR TURBIN
ENGINE POWERED AIRPLANES*)

DENGAN RAHMAT TUHAN YANG MAHA ESA
MENTERI PERHUBUNGAN REPUBLIK INDONESIA,

- Menimbang :
- a. bahwa Pasal 37 Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan mengatur persyaratan untuk memperoleh sertifikat kelaikudaraan harus memenuhi standar kebisingan dan standar emisi gas buang;
 - b. bahwa persyaratan bahan bakar terbuang dan emisi gas buang untuk pesawat udara yang digerakkan dengan mesin turbin telah diatur dalam Peraturan Menteri Perhubungan Nomor KM 28 Tahun 2009, namun perlu dilakukan perubahan guna meningkatkan standar kelaikan pesawat udara dan perlindungan terhadap lingkungan hidup;

- c. bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a dan huruf b, perlu menetapkan Peraturan Menteri Perhubungan tentang Perubahan Atas Peraturan Menteri Perhubungan Nomor KM 28 Tahun 2009 tentang Peraturan Keselamatan Penerbangan Sipil Bagian 34 Amandemen 1 (*Civil Aviation Safety Regulations Part 34 Amendment 1*) tentang Persyaratan Bahan Bakar Terbuang dan Emisi Gas Buang untuk pesawat udara yang digerakkan dengan mesin Turbin (*Fuel Venting And Exhaust Emission Requirement for Turbine Engine Powered Airplanes*);

- Mengingat :
1. Undang-Undang Republik Indonesia Nomor 1 Tahun 2009 tentang Penerbangan (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 1, Tambahan Lembaran Negara Republik Indonesia Nomor 4956);
 2. Peraturan Pemerintah Nomor 3 Tahun 2001 tentang Keamanan dan Keselamatan Penerbangan (Lembaran Negara Republik Indonesia Tahun 2001 Nomor 9, Tambahan Lembaran Negara Nomor 4075);
 3. Peraturan Presiden Nomor 24 Tahun 2010 tentang Kedudukan, Tugas dan Fungsi Kementerian Negara serta Susunan Organisasi, Tugas dan Fungsi Eselon I Kementerian Negara, sebagaimana telah diubah terakhir dengan Peraturan Presiden Nomor 135 Tahun 2014;
 4. Peraturan Presiden Nomor 7 Tahun 2015 tentang Organisasi Kementerian Negara (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 8);
 5. Peraturan Menteri Perhubungan Nomor KM 28 Tahun 2009 tentang Peraturan Keselamatan Penerbangan Sipil Bagian 34 Amandemen 1 (*Civil Aviation Safety Regulations Part 34 Amendment 1*) tentang Persyaratan Bahan Bakar Terbuang dan Emisi Gas Buang untuk Pesawat Udara yang Digerakkan dengan Mesin Turbin (*Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes*);
 6. Peraturan Menteri Perhubungan Nomor KM 60 Tahun 2010 tentang Organisasi dan Tata Kerja Kementerian Perhubungan sebagaimana telah diubah dengan Peraturan Menteri Perhubungan Nomor PM 68 Tahun

2013;

7. Peraturan Menteri Perhubungan Nomor 41 Tahun 2011 tentang Organisasi dan Tata Kerja Kantor Otoritas Bandar Udara;
8. Peraturan Menteri Nomor 63 Tahun 2011 tentang Kriteria, Tugas, dan Wewenang Inspektur Penerbangan sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 98 Tahun 2011;

MEMUTUSKAN:

Menetapkan : PERATURAN MENTERI PERHUBUNGAN TENTANG PERUBAHAN ATAS PERATURAN MENTERI PERHUBUNGAN NOMOR KM 28 TAHUN 2009 TENTANG PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN 34 AMANDEMEN 1 (*CIVIL AVIATION SAFETY REGULATIONS PART 34 AMENDMENT 1*) TENTANG PERSYARATAN BAHAN BAKAR TERBUANG DAN EMISI GAS BUANG UNTUK PESAWAT UDARA YANG DIGERAKKAN DENGAN MESIN TURBIN (*FUEL VENTING AND EXHAUSE EMISSION REQUIREMENT FOR TURBIN ENGINE POWERED AIRPLANES*).

Pasal I

Beberapa ketentuan dalam Lampiran Peraturan Menteri Perhubungan Nomor KM 28 Tahun 2009 tentang Peraturan Keselamatan Penerbangan Sipil Bagian 34 Amandemen 1 (*Civil Aviation Safety Regulations Part 34 Amendment 1*) tentang Persyaratan Bahan Bakar Terbuang dan Emisi Gas Buang untuk pesawat udara yang digerakkan dengan mesin Turbin (*Fuel Venting And Exhaust Emission Requirement for Turbine Engine Powered Airplanes*), diubah sebagai berikut:

1. Ketentuan butir 34.0 diubah sehingga berbunyi sebagai berikut:

This Civil Aviation Safety Regulation (CASR) Part 34 sets the implementing rules of Fuel Venting and Exhaust Emission Requirements For Turbine Engine Powered Airplanes as required by Aviation Act Number 1, 2009 Chapter VIII "Airworthiness and Aircraft Operational" Article 37.

2. Ketentuan butir 34.1 ditambahkan definisi sebagai berikut:

Characteristic level has the meaning given in Appendix 6 of ICAO Annex 16 as of July 2008. The characteristic level is a calculated emission level for each pollutant based on a statistical assessment of

measured emissions from multiple tests.

Derivative engine for emissions certification purposes means an engine that has the same or similar emissions characteristics as an engine covered by a type certificate issued under CASR part 33. These characteristics are specified in Section 34.48.

Introduction date means the date of manufacture of the first individual production engine of a given engine model or engine type certificate family to be certificated. Neither test engines nor engines not placed into service affect this date.

Tier, as used in this part, is a designation related to the NOX emission standard for the engine as specified in CASR Part 34 Sec. 34.21 or Sec. 34.23 of this part (e.g., Tier 0).

CO2 Carbon dioxide.

kN Kilonewton(s)

kW Kilowatt(s)

lb Pound(s)

3. Menambahkan ketentuan butir 34.9 yang berbunyi sebagai berikut:

Spare engines. Certain engines that meet the following description are excepted:

- (1) This exception allows production of an engine for installation on an in-service aircraft. A spare engine may not be installed on a new aircraft.*
- (2) Each spare engine must be identical to a sub-model previously certificated to meet all applicable requirements.*
- (3) A spare engine may be used only when the emissions of the spare do not exceed the certification requirements of the original engine, for all regulated pollutants.*
- (4) No separate approval is required to produce spare engines.*
- (5) The record for each engine excepted under this paragraph (c) must indicate that the engine was produced as an excepted spare engine.*
- (6) Engines produced under this exception must be labeled "EXCEPTED SPARE" in accordance with Sec. 45.13 of this CASR.*

On and after July 18, 2012, and before August 31, 2013, a manufacturer may produce up to six Tier 4 compliant engines that meet the NO_x standards of paragraph (d)(1)(vi) of this section rather than Sec. 34.23(a)(2). No separate approval is required to produce these engines. Engines produced under this exception are to be

labeled "COMPLY" in accordance with CASR Part 45 Sec 45.13

4. Ketentuan huruf a pada butir 34.10 diubah sehingga butir 34.10 berbunyi sebagai berikut:
 - (a) *The provisions of this subpart are applicable to all new aircraft gas turbine engines of classes T3, T8, TSS, and TF equal to or greater than 36 kilonewtons (8090 pounds) rated output, manufactured on or after January 1, 1974, and to all in-use aircraft gas turbine engines of classes T3, T8, TSS, and TF equal to or greater than 36 kilonewtons (8090 pounds) rated output manufactured after February 1, 1974.*
 - (b) *The provisions of this subpart are also applicable to all new aircraft gas turbine engines of class TF less than 36 kilonewtons (8090 pounds) rated output and class TP manufactured on or after January 1, 1975, and to all in-use aircraft gas turbine engines of class TF less than 36 kilonewtons (8090 pounds) rated output and class TP manufactured after January 1, 1975.*
 - (c) *To all in operated aircraft gas turbine engine of classes stated in paragraph (a) and (b) of this section shall comply with the provisions of this subpart not later than December 31, 1995.*
5. Ketentuan butir 34.21 diubah sehingga butir 34.21 berbunyi sebagai berikut:
 - (a) *Exhaust emissions of smoke from each new aircraft gas turbine engine of class T8 manufactured on or after February 1, 1974, shall not exceed a smoke number (SN) of 30.*
 - (b) *Exhaust emissions of smoke from each new aircraft gas turbine engine of class TF and of rated output of 129 kilonewtons (29,000 pounds) thrust of greater, manufactured on or after January 1, 1976, shall not exceed.*

$$SN = 83.6 (rO) - 0.274 \text{ (rO is in kilonewtons).}$$
 - (c) *Exhaust emissions of smoke from each new aircraft gas turbine engine of class T3 manufactured on or after January 1, 1978, shall not exceed a smoke number (SN) of 25.*
 - (d) *Gaseous exhaust emissions from each new aircraft gas turbine engine shall not exceed:*
 - (1) *For Classes TF, T3, T8 engines greater than 26.7 kN (6,000 lb) rated output:*
 - (i) *Engines manufactured on or after January 1, 1984:*

$$\text{Hydrocarbons: } 19.6 \text{ g/kN rO.}$$
 - (ii) *Engines manufactured on or after July 7, 1997:*