

An aerial photograph of a road with a blue overlay. The road is a multi-lane highway with a central divider, curving through a landscape. The blue overlay is semi-transparent and covers the entire image, creating a monochromatic effect. The text is centered in the middle of the image.

FINAVIA

for smooth travelling

EASA Medical and Physical Fitness Requirements

Veli-Matti Säaskilahti

Zurich CTIF

14.10.2015

EASA RFFS Rulemaking group

Four meetings 2014:

1st meeting: 20 – 22 May 2014

2nd meeting: 1 – 3 July 2014

3rd meeting: October 21 – 23 2014

4th meeting: December 9 -11 2014

Remission Factors

Cargo Flights

Medical and Fitness standards

The EASA regulatory system

CS

Technical standards to be used in the certification / approval process

“Building blocks” for the certification basis

AMC

Technical / procedural material

One means to comply with the rule – but not the only

Presumption of compliance

GM

Interpretative / explanatory material

Provides guidance on how the rules should be understood

ARFF Medical and Fitness standards

- Because of the complexity of the subject, EASA will publish a separate NPA covering Medical/Fitness Standards
- EASA will circulate a questionnaire via ACI-Europe
- ARFF Medical/Fitness Standards same principles and structure like ATC and pilots

Medical Standards

Current provisions (Reg. 139/2014)

ADR.OPS.B.010 (a)(4)

Rescue and firefighting personnel potentially required to act in aviation emergencies demonstrate their medical fitness to execute their functions satisfactorily, taking into account the type of activity

AMC1 ADR.OPS.B.010(a)(4)

The aerodrome operator should ensure that appropriate medical standards are met by RFFS personnel

ARFF Medical

General principles to IR , details to AMC

The competent authority for occupational health medical practitioners (OHMP) assessing the medical fitness of RFFS personnel. All medical reports and records should be held OHMP.

RFFS personnel shall not perform their duties at any time when they suffer any medical or surgical condition

RFFS personnel shall, without undue delay, seek advice and/or be assessed by from an OHMP when there is any doubt regarding fitness to perform their duties.

Following recovery from significant illness or injury, on the recommendation of the OHMP, the firefighter shall undergo the relevant RFFS physical fitness tests prior to a return to operational duty.

Where RFFS personnel do not fully meet the medical standards, an individual assessment may be made, taking into account their contracted duties.

Medical Examination

Every 3 years until the age of 50;
Every year thereafter; and
On clinical indication.

The medical examination(examples)

An assessment of the firefighter's medical history

A clinical examination of the following:

Weight and Body Composition - The standing height and body weight
BMI < 35 (AMC)

Cardiovascular system including blood pressure measurement:
140 mmHg systolic, 90 mmHg diastolic

Respiratory system

Musculoskeletal system

Otorhino-laryngology - A routine inspection of ears, nose and throat,
Conversational Hearing Test.

Visual system - Distance vision, Near vision, Visual fields, Colour vision

Urine test for blood, protein and sugar

Blood tests

Full blood count

Liver function

Kidney function

blood sugar

serum lipids, including cholesterol.

ECG - A standard 12-lead resting electrocardiogram

Medical requirements

Cardiovascular system
Respiratory system
Digestive system
Metabolic and endocrine systems
Haematology
Genitourinary system
Infectious disease
Obstetrics and gynecology
Musculoskeletal system
Psychiatry
Neurology
Visual system
Colour vision
Otorhinolaryngology
Dermatology
Oncology

ARFF Fitness

Countries have very different testing methods

New requirements based on UK scientific research

Discuss the Roles in ARFF – different requirements; Incident commander, control room worker

PHYSICAL FITNESS EVALUATION

Testing annually

Significant absence, illness or injury prior to a return to operational duty

Fitness evaluation include

- Pre-evaluation health questionnaire

- Evaluation of aerobic capacity

- Evaluation of muscular strength, endurance and flexibility.

PHYSICAL FITNESS TESTS

Operational fitness tests

Functions may be included as part of an operational exercise or carried out separately.

OR

Simulated operational physical fitness tests

Operational fitness tests

Stair or ladder climbing while carrying an additional load

Ladder raise and extension

Equipment carry

Rescue drag

Operating in an enclosed space

Hose drill and operations

Operating in a high temperature environment with breathing apparatus.

Aerobic fitness assessment:

For full operational duties a VO₂ Max of at least the firefighters' average or better for age and gender and not less than 35 ml/kg/min is required.

The estimation of VO₂MAX may be performed using the following tests:

Shuttle run;

Validated Step test, e.g. Cooper, Chester;

Cycle ergometer;

Treadmill;

Full spiro-ergometry.

Simulated operational physical fitness test

Muscular strength

- Handgrip dynamometer;
- Static bicep curl with dynamometer;
- Lat pull
- Static leg press with dynamometer;
- Bench press
- Leg press

Muscular endurance

- Push-ups, Modified push-ups
- Pull-ups
- Bent knee sit-ups
- Crunches in a given time, Crunches to cadence

Flexibility

- Sit and reach, Modified sit and reach
- Trunk extension
- Shoulder elevation

Aerobic fitness assessment: same like Operational fitness test



Fitness for Fire and Rescue. Standards, Protocols and Policy.



Remission Factors

NPA(Notices of Proposed Amendments)
Q2/2015

End of commenting period: 09/10/2015

Opinion/Decision: Q2/2016

Application Forms ▾

Regulations ▾

AGENCY RULES (SOFT LAW)

Agency Decisions

Acceptable Means of Compliance (AMC) and Guidance Material (GM) ▾

Certification Specifications (CSs)

RULEMAKING PROCESS

Rulemaking programmes ▾

Rulemaking subjects

Terms of Reference (ToR) and Group Composition (GC)

Notices of Proposed Amendment (NPA) ▾

- NPA Review Groups
- Notices of Proposed Amendment information

Comment Response Documents (CRD) ▾

Opinions ▾

PRODUCT CERTIFICATION

Public consultations ▾

Type Certificate Data Sheets (TCDS)

Specific Airworthiness Specifications (SAS) ▾

Master Minimum Equipment Lists (MMEL)

Operations Evaluation Board Reports (OEB) / Operational Suitability Data (OSD)

09
JUL
2015

NPA 2015-09

Rescue and Firefighting Services (RFFS) at aerodromes

Expiration date for comments: 09/10/2015

This Notice of Proposed Amendment (NPA) addresses safety and proportionality issues related to the provision of rescue and firefighting services (RFFS) at aerodromes.

The specific objective of this NPA is to establish and maintain a high uniform level of civil aviation safety in the field of aerodrome operations, by clarifying and offering adequate guidance on the provision of RFFS. The proposal also introduces new requirements included in ICAO Annex 14 (sixth edition), as well as Guidance Material from ICAO Doc 9137, Part 1, (fourth edition), thereby fulfilling the European Union's commitment to support Member States (MSs) to meet their obligations towards ICAO.

This NPA proposes changes to the existing Acceptable Means of Compliance (AMC) and Guidance Material (GM) annexed to ED Decision 2014/012/R. More specifically, it introduces a new method of determining the RFFS level of protection required for all-cargo, mail, ferry, training, test and end-of-life aeroplane operations. It also clarifies the role and responsibilities RFFS and the calculation of the required quantities of extinguishing agents, and ensures a consistent application of a method for reducing the RFFS level of protection, the so-called 'remission factor'. Finally, it strengthens the requirement for rescue and firefighting (RFF) vehicles and equipment maintenance, by including them into the aerodrome maintenance program.

The proposed changes are expected to establish and maintain a high level of safety, increase the required cost-effectiveness in the existing AMC/GM applicable to aerodromes and their operators, strengthen harmonisation across MSs and ensure compliance with ICAO.

Downloads

 NPA 2015-09

Read More

RELATED RULEMAKING SUBJECT(S):

Rulemaking Subject
[Rescue and firefighting services at aerodromes](#)

      

Rulemaking proposal

Any person or organisation may propose the development of a new rule or an amendment thereto. Check [here](#) to see how.

We use cookies on this site to enhance your user experience

By clicking any link on this page you are giving your consent for us to set cookies.

This Notice of Proposed Amendment (NPA) addresses safety and proportionality issues related to the provision of rescue and firefighting services (RFFS) at aerodromes.

The specific objective of this NPA is to establish and maintain a high uniform level of civil aviation safety in the field of aerodrome operations, by clarifying and offering adequate guidance on the provision of RFFS. The proposal also introduces new requirements included in ICAO Annex 14 (sixth edition), as well as Guidance Material from ICAO Doc 9137, Part 1, (fourth edition), thereby fulfilling the European Union's commitment to support Member States (MSs) to meet their obligations towards ICAO.

This NPA proposes changes to the existing Acceptable Means of Compliance (AMC) and Guidance Material (GM) annexed to ED Decision 2014/012/R. More specifically, it introduces a new method of determining the RFFS level of protection required for all-cargo, mail, ferry, training, test and end-of-life aeroplane operations. It also clarifies the role and responsibilities of RFFS and the calculation of the required quantities of extinguishing agents, and ensures a consistent application of a method for reducing the RFFS level of protection, the so-called 'remission factor'. Finally, it strengthens the requirement for rescue and firefighting (RFF) vehicles and equipment maintenance, by including them into the aerodrome maintenance program.

The proposed changes are expected to establish and maintain a high level of safety, increase the requirements' cost-effectiveness in the existing AMC/GM applicable to aerodromes and their operators, strengthen harmonisation across MSs and ensure compliance with ICAO.

The aerodrome category for rescue and fire fighting is determined according to the Table 1, based on the longest aeroplanes expected to use the aerodrome and their fuselage width. If, after selecting the category appropriate to the longest aeroplane's overall length, that aeroplane's fuselage width is greater than the maximum width in Table 1, column 3, for that category, then the category for that aeroplane should actually be one category higher.

Table 1

Aerodrome category for rescue and fire fighting		
Aerodrome Category (1)	Aeroplane overall length (2)	Maximum fuselage width (3)
1	0 m up to but not including 9 m	2 m
2	9 m up to but not including 12 m	2 m
3	12 m up to but not including 18 m	3 m
4	18 m up to but not including 24 m	4 m
5	24 m up to but not including 28 m	4 m
6	28 m up to but not including 39 m	5 m
7	39 m up to but not including 49 m	5 m
8	49 m up to but not including 61 m	7 m
9	61 m up to but not including 76 m	7 m
10	76 m up to but not including 90 m	8 m

Cargo Flights

Aerodrome category	Re-classification of aerodrome category for all-cargo and mail aeroplanes
1	1
2	2
3	3
4	4
5	5
6	5
7	6
8	6
9	7
10	7

A woman with long, dark hair is seen from behind, looking out a window. The scene is overlaid with a solid blue color. The word "FINAVIA" is written in white, italicized, uppercase letters across the center of the image.

FINAVIA