Federal Aviation Regulations – National Aviation Regulations of Russia

O Chernykh\textsuperscript{1, a} and M Bakiiev\textsuperscript{2, b}

\textsuperscript{1}Department of Civil Aviation Engineering, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, 29 Jiangjun Avenue, Nanjing, 211106, Jiangsu province, China
\textsuperscript{2}Department of Fuselage Airframe Computer Projects, Antonov State Company, 1 Tupolev Street, Kyiv, 03062, Ukraine

\textsuperscript{a}alex@nuaa.edu.cn; \textsuperscript{b}mambet12@gmail.com

Abstract. Chinese Aerospace Engineering is currently developing cooperation with Russia on a wide-body airplane project that has directed the work towards better understanding of Russian airworthiness management system. The paper introduces national Aviation regulations of Russia, presents a comparison of them with worldwide recognized regulations, and highlights typical differences. They have been found to be: two general types of regulations used in Russia (Aviation Regulations and Federal Aviation Regulations), non-unified structure of regulations on Aircraft Operation management, various separate agencies responsible for regulation issuance instead of one national aviation authority, typical confusions in references. The paper also gives a list of effective Russian Regulations of both types.

1. Introduction

Recently, Russian aviation regulations have become a challenge for Chinese professionals in Aerospace industry due to a reason of established cooperation between China and Russia in Aerospace matters. In particular, the work of Chinese COMAC Aircraft Company has currently been extended to a new long range wide-body commercial airplane (C929/C939) which has been agreed to be in cooperation with Russia.

China has long been an operator of aircraft purchased from abroad but now China has joined a narrow group of countries which are capable of designing and manufacturing their own aircraft. Now, the entire aircraft development process along with aircraft airworthiness substantiation has become of the highest importance. It’s well known, an airplane cannot enter service unless a manufacturer has demonstrated that an airplane complies with applicable airworthiness regulations and a national aviation authority agrees they’ve been met. Since development process has involved Russia as the “third party”, Russian airworthiness regulations have to be additionally taken into consideration. This fact has been put on the basis of further improvement of educational level in Chinese Aerospace-related universities [1].

However, the methodology of working with Russian regulations is quite different due to their dissimilarity from local Chinese Civil Aviation Regulations (CCAR) and worldwide known Federal Aviation Regulations (FAR or 14 CFR, being part of Title 14 of the Code of Federal Regulations) of the Federal Aviation Administration (FAA) of the U.S.A. or Certification Specifications (CS) of the European Aviation Safety Agency (EASA) of the European Union.
Russian aviation regulations include two principal types. They have been:

1. Aviation Regulations and
2. Federal Aviation Regulations.

The full list of Russian aviation regulations including all documents of the two above-mentioned types hasn’t been found in open English-language sources and is not even provided in Russian-language informative space. The book on certification of aviation products written by Krasotkin [2] contains only the list of the 1st type, the Aviation Regulations, remarking, not covering all of them, and no any document of the 2nd type, the Federal Aviation Regulations. Surprisingly, even though the early Russian Federal Aviation Regulations have started to be issued since 1998 [3], they haven’t been mentioned in the book of Krasotkin [2] published 9 years later in 2007. However, the regulations can be found on a number of official websites of Russian authorities. The Aviation Regulations are provided on the website of the Interstate Aviation Committee (IAC) which is responsible for their issuance and handling [4]. Having been issued by various authorities, the Russian Federal Aviation Regulations have been disposed on websites of Russian ministries and agencies, but it has been made in an uncoordinated manner. Each authority’s website only provides documents of own direct influence and control [1]. Among the mentioned, there are the following authorities which govern aviation industry in Russia: the Government of the Russian Federation [5], the Ministry of Transport [6], the Ministry of Defense [7], the Federal Air Transport Agency [8].

Unfortunately, there is no any full unified list of the Federal Aviation Regulations, being provided so far. It’s worth noting, the first attempt to compose such a unified list of Russian aviation regulations has been made by the Federal State Unitary Enterprise Scientific Research Institute of Standardization and Unification in 2014 resulting in establishment of the Unified System of Aviation Standards [9], however its website hasn’t been properly updated since 2014, so it has been found providing regulations which are no more effective. One of the main purposes for this paper has become presenting the full list of Russian aviation regulations collected by the authors as of November 2016.

2. Aviation Regulations (AP)
The Aviation Regulations (AP) [10] have been issued by the Interstate Aviation Committee (IAC) and are effective in all member countries of the interstate treaty. Russia, being a member, has also adopted this set of regulations. The Aviation Regulations are commonly shortened to a confusing abbreviation “AP” which has come from a transliteration “Aviatsionnye Pravila” of their Russian name “Авиационные Правила (АП)”.

The regulations have been issued in Russian language exceptionally [10]. The content has been arranged in Parts with a serial number “AP-XXX”. The list and titles of the Aviation Regulations (AP) can be found on the official website of the Interstate Aviation Committee (IAC) [4] and are given in Appendix A with explanations.

In general, the Parts of Aviation Regulations (AP) follow the typical content structure and serial numbers of worldwide commonly accepted structure of regulations (such as, of the American FAR regulations). This has been an outcome of continuous harmonization process started in 1990s by the Interstate Aviation Committee [2]. But it’s worth noting that the Aviation Regulations (AP) do not have as many parts and do not cover as many topics as the American FAR regulations or European CS rules do. The issued Parts primarily cover Initial Airworthiness matters and are all displayed in this paper.

Moreover, it has recently been announced that the seven AP Parts (AP-23, AP-25, AP-27, AP-36, AP-139, AP-170 Volume I, and AP-183) have become ineffective in Russia and the relevant governmental orders have been signed [11, 12]. However, the Parts themselves are still effective as the Parts of the AP regulations managed by the Interstate Aviation Committee.

3. Federal Aviation Regulations (FAP)
The Federal Aviation Regulations (FAP) [3] have been issued as Orders of various Russian ministries and agencies [1, 5-8]. Their abbreviation is shortened as “FAP” which has also come from a transliteration “Federal’nye Aviatsionnye Pravila” of the Russian name “Федеральные Авиационные Правила (ФАП)”. The FAP regulations are considered Russian national regulations being effective in Russia exceptionally.

Such a confusing name of Russian regulations sounding completely identical to the American Federal Aviation Regulations (FAR) has been grounded on the fact that the full name of Russia has been the Russian Federation. All Russian governmental agencies hold the Federal status, that is why the word “Federal” has also come into the name of Russian national regulations. To avoid misunderstanding, the abbreviation “FAP” has been established.

3.1. The detailed list of the FAP regulations
The FAP regulations have also been issued in Russian language only [3]. The content has been distributed among numerous Orders with a serial number and a year of issuance, such as “Order XXX (Year)” . The full list of the FAP regulations hasn’t been found in open sources. Having been collected by the authors, they are listed in Appendix B according to responsible authorities.

Studying the FAP regulations and their arrangement of serial numbers for any similarity with the American FAA, European EASA regulations, and regulatory material of the International Civil Aviation Organization (ICAO), no correspondence has been found. For instance, “Order 147 (2008). Requirements to air crew men, aircraft maintenance engineers, and flight support crew / flight dispatchers in Civil Aviation” [13] covers similar matters as the following American FAA regulations [14]:

- FAR Part 61 – Certification: Pilots, flight instructors, and ground instructors,
- FAR Part 63 – Certification: Flight crewmembers other than pilots,
- FAR Part 65 – Certification: Airmen other than flight crewmembers;

or European EASA regulations – CS parts, including Acceptable Means of Compliance (AMC) [15]:

- CS-FCD – Flight Crew Data,
- AMC Part-ARA – Authority Requirements for Aircrew,
- AMC Part-ORA – Organisation Requirements for Aircrew,
- AMC Part-CC – Cabin Crew,
- AMC Part-FCL – Flight Crew Licensing;

or regulatory material of ICAO [16]:

- Annex 1 – Personnel Licensing,
- Doc 9868 – Personnel Training.

3.2. “FAP-XXX” reference using a serial number of a corresponding American FAR regulation
However, some of the Orders, in addition to their serial number and a year, have been commonly referred to as “FAP-XXX” with a separate serial number as it has been noted in the list of the FAP regulations for positions 55-61 (see Appendix B). These “additional” serial numbers are different from the serial numbers of the relevant Orders. But the “additional” numbers have been found to exactly correspond to the relevant parts of the American FAR regulations [14]. For instance:

- “FAP-67”. Order 50 (2002) of the Ministry of Transport. Medical examination of air crew, dispatchers, flight attendants, pilot students, and entrants to schools of Civil Aviation.

>>> FAR Part 67 – Medical standards and certification.
- “FAP-119”. Order 246 (2015) of the Ministry of Transport. Requirements to juridical persons, private entrepreneurs, who implement commercial air transportation.

>>> FAR Part 119 – Certification: Air carriers and commercial operators.
- “FAP-142”, Order 289 (2015) of the Ministry of Transport. Requirements to educational institutions and organizations preparing aviation specialists of proper level.

>>> FAR Part 142 – Training centers.
• “FAP-145”, Order 285 (2015) of the Ministry of Transport. Requirements to juridical persons, private entrepreneurs, who implement maintenance of Civil Aviation aircraft.

No correspondence between these “additional” “FAP-XXX” numbers and the European EASA or ICAO regulation denominations [15, 16] has been found.

But it’s worth noting that neither of above-mentioned serial numbers “FAP-XXX” can be found in body of a relevant Order, for example [17]. It means that these references “FAP-XXX” can be treated as a professional slang intended to simplify work with the FAP regulations just indicating the corresponding American FAR regulations but NOT having any legal power.

3.3. “FAP-XXX” reference using a serial number of an Order
On the contrary, it has also been found a case [18] that those “additional” designations of “FAP-XXX” sometimes use the very serial numbers of Orders losing a year reference. For instance, “Order 216 (2009)” can be referred to as “FAP-216”. The lack of year of issuance may bring significant confusion as Orders are issued according to their series each year independently. So they are different for various years, such as the “Order 216 (2009). Requirements to air traffic dispatchers and parachute instructors” and the “Order 216 (2015). Requirements to juridical persons who implement aeronautical service for aircraft of Russian Federation airspace users” both obviously have various contents.

As a result, it is advised to avoid any reference like “FAP-XXX” instead of legally supported Order’s serial number with a year of issuance like “Order XXX (Year)”. Otherwise, it may bring unreasonable confusion into work with Orders.

In general, the Russian Federal Aviation Regulations (FAP) are mainly used for Aircraft Operation and Continued Airworthiness management. But the structure of documents significantly differs from American or European regulations as they display their own content structure [3,13,17] not following typical operation regulations such as the American FAR parts [14]:

- FAR Part 91 – General operating and flight rules,
- FAR Part 121 – Domestic, flag, and supplemental operations,
- FAR Part 135 – Commuter and on demand operations;

Or the European CS parts [15]:

- CS-AWO – All Weather Operations,
- AMC Part-ARO – Authority Requirements for Air Operations,
- AMC Part-ORO – Organisation Requirements for Air Operations,
- AMC Part-CAT – Commercial Air Transport Operations;

And being very different from ICAO regulatory documents [16]:

- Annex 6 – Operation of Aircraft,
- Doc 8168 – Aircraft Operations.

The absolutely non-unified structure of the Russian Federal Aviation Regulations (FAP) is assumed to be a result of distribution of Airworthiness management responsibilities among separate agencies [1] instead of one national aviation authority that has been common for other countries.

4. Conclusion
The work with Russian regulation management system has been found to have certain difficulties for Chinese Aerospace industry professionals not just because of regulation content is arranged into parts differently from Chinese regulations. The Russian regulations have not been fully harmonized with unified American or European Union regulations either, utilizing two different types of regulations.

While the aspects of Initial Airworthiness have been concentrated in the 1st type – Aviation Regulations (AP), which parts correspond to the worldwide commonly used structure of regulations. Aircraft Operation and Continued Airworthiness matters have been covered in the 2nd type – Federal Aviation Regulations (FAP) which have been treated as national Russian regulations. However, the FAP regulations follow their own arrangement of contents distributed among numerous Orders
which have been issued and managed by a number of Russian authorities with their own field of influence.

Some confusing key dangers have also been highlighted to attract attention of professionals and minimize the risk of misunderstanding the Russian Federal Aviation Regulations (FAP), such as referring to Orders with an indicating reference of “FAP-XXX”. It has been advised to avoid such cases referring to as “Order XXX (Year)” exceptionally.

The above-mentioned aspects have been put the highest concern for the further development of international relations in Aerospace matters.

### Appendix A

The full list and titles of the Aviation Regulations (AP) issued by the Interstate Aviation Committee (IAC) (the IAC website’s translation into English [4]):

1. AP-21. Certification procedures for Aeronautical Products, Design Organisations and Manufacturers.
2. AP-23. Airworthiness standards for Light Airplanes. *(invalid in Russia)*
3. AP-25. Airworthiness standards for Transport category Airplanes. *(invalid in Russia)*
4. AP-OLS. Airworthiness standards for Very Light Airplanes. *(AP-VLA – literally)*
5. AP-27. Airworthiness standards for Normal category Rotorcraft. *(invalid in Russia)*
6. AP-29. Airworthiness standards for Transport category Rotorcraft.
7. AP-31. Airworthiness standards for Manned Free Balloons.
8. AP-33. Airworthiness standards for Engines.
9. AP-34. Emission Requirements.
10. AP-VD. Airworthiness standards for Auxiliary Power Units. *(AP-APU – literally)*
11. AP-35. Airworthiness standards for Propellers. *(invalid in Russia)*
12. AP-36. Noise Certification. *(invalid in Russia)*
13. AP-39. Airworthiness Directives.
14. AP-139. Certification of Aerodromes. *(invalid in Russia)*
   - Volume I – Procedures for Certification of Aerodromes.
   - Volume II – Certification Requirements to Aerodromes.
15. AP-145. Repair Stations.
16. AP-170. Certification of Aerodrome and En-Route Equipment. *(invalid in Russia)*
   - Volume I – Procedures for Certification of Aerodrome and En-Route Equipment.
   - Volume II – Certification Requirements to Aerodrome and En-Route Equipment.
17. AP-183. Aviation Register Representatives. *(invalid in Russia)*

One more example of a transliterated abbreviation found in the list needs to be explained:

- AP-OLS stands for “Ochen Legkie Samolety” (Russian: Очень Легкие Самолеты (ОЛС)) and means “Very Light Airplanes”.
- AP-VD stands for “Vspomogatelnyi Dvigatel” (Russian: Вспомогательный Двигатель (ВД)) and means “Auxiliary Power Unit”.

### Appendix B

The full list and titles of the Federal Aviation Regulations (FAP) arranged according to responsible authorities (the authors’ translation into English):

---

Orders of the Government of the Russian Federation
1. Order 360 (1998). About Federal Regulations of airspace use and Federal Aviation Regulations.
2. Order 138 (2010). Federal Regulations of Russian Federation airspace use.
3. Order 530 (2008). Federal Aviation Regulations of search and rescue in the Russian Federation.
4. Order 303 (2000). Rules of aircraft accident and incident investigation for Experimental Aircraft.
5. Order 1329 (1999). Rules of aircraft accident and incident investigation for Public Aircraft.
6. Order 609 (1998). Rules of aircraft accident and incident investigation for Civil Aircraft.
7. Order 262 (2015). Requirements to aerodromes intended for take-off, landing, taxiing, and parking of Civil aircraft.
8. Order 251 (2015). Procedure of state registration of Civil Aviation aerodromes and heliports.
9. Order 250 (2015). Procedure of landing ground owner’s notification on commencement, suspension, or termination of landing ground operation for Civil aircraft flights, and registration in Civil Aviation authority.
10. Order 216 (2015). Requirements to juridical persons who implement aeronautical service for aircraft of Russian Federation airspace users.
11. Order 297 (2014). Radio communication support of aircraft flights and aircraft electrical communication in Civil Aviation.
12. Order 60 (2014). Meteorological information support for aircraft flight management.
13. Order 32 (2014). Requirements to Civil Aviation personnel license formatting.
14. Order 362 (2012). Implementation of radio communication in Russian Federation airspace.
15. Order 6 (2012). Russian Federation airspace use planning and management.
16. Order 293 (2011). Air transport management in the Russian Federation.
17. Order 69 (2011). Requirements to landing grounds located on land and water.
18. Order 249 (2009). Requirements to mandatory certification of natural and juridical persons performing aviation works. Certification procedure.
19. Order 216 (2009). Requirements to air traffic dispatchers and parachute instructors.
20. Order 128 (2009). Flight preparation and implementation in Civil Aviation.
21. Order 147 (2008). Requirements to air crew men, aircraft maintenance engineers, and flight support crew / flight dispatchers in Civil Aviation.
22. Order 141 (2008). Rules of dangerous cargo transportation by civil aircraft.
23. Order 82 (2007). General Regulations of passenger, baggage, cargo air transportation and requirements to passenger, consignor, consignee service.
24. Order 142 (2005). Aviation safety requirements to airports.
25. Order 31 (2005). Joint facilities of air traffic implementation.
26. Order 1 (2005). Flight checks of ground radio communication equipment, aircraft electrical communication, and light signaling equipment of Civil Aviation aerodromes.
27. Order 202 (2003). Technical means for Aviation work implementation. Requirements and certification procedures.
28. Order 150 (2003). Certification requirements to juridical persons engaged in airport works in passenger, baggage, cargo and mail service.
29. Order 149 (2003). Certification requirements to juridical persons engaged in airport works in electrical light support of flights.
30. Order 147 (2003). General Aviation operators. Requirements to General Aviation operators, procedures of registration and inspection of General Aviation operator service.
31. Order 132 (2003). Aircraft Example. Requirements and certification procedures.
32. Order 118 (2003). Rules of putting single aircraft examples into General Aviation service.
33. Order 29 (2003). Aviation safety requirements to General Aviation operators.
34. Order 19 (2003). Certification of ground aviation equipment.
35. Order 126 (2002). Certification requirements to organizations implementing quality check for aircraft fuel, oils, lubricants and special liquids.

Orders of the Ministry of Defense

36. Order 265 (2009). Medical support of Public Aviation flights.
37. Order 60 (2009). Unification of Public aviation personnel work conditions.
38. Order 150 (2007). Federal Aviation Regulations of Public Aviation Navigation.
39. Order 275 (2004). Federal Aviation Regulations of Public Aviation flight implementation.
40. Order 460 (2002). State registration of Public aircraft.
41. Order 440 (2002). State registration of Public Aviation aerodromes.
42. Order 431 (2001). Federal Aviation Regulations of ground service organization in Public Aviation.
43. Order 420 (2001). Organization of objective supervision in Public Aviation.
44. Order 412 (2001). Organization of training center in Public Aviation.

Orders of the Russian Air Navigation Agency (abolished in 2009)
45. Order 119 (2007). Placement of marking facilities on buildings, constructions, communication lines, electricity lines, radio equipment and other units installed for aircraft flight safety protection.
46. Order 116 (2007). Certification Regulations for joint facilities of air traffic implementation.
-- Orders of the Russian Aerospace Agency (present name – State Corporation for Space Activities)
47. Order 165 (2003). Organization of works of experimental aviation medical staff.
48. Order 164 (2003). Organization of flight medical center works for examination of experimental aviation.
49. Order 80 (2003). Flight medical examination of experimental aviation flight staff.

Orders of the Federal Air Transport Service (present name – Federal Air Transport Agency)
50. Order 121 (2000). Certification requirements to juridical persons who implement airport work in aerodrome support of aircraft flights.
51. Order 89 (2000). Certification requirements to organizations of aviation fuel supply for air transportation.
52. Order 115 (1999). Certification of juridical persons who implement medical examination of aviation staff.
53. Order 10 (1999). Mandatory certification of organizations engaged in supply of onboard food for passengers and air crew.

Collective Order of Russian Ministries
54. Order 136/42/51 (2002) of the Ministry of Defense, Ministry of Transport, Russian Aerospace Agency. Federal Aviation Regulations of flights in airspace of the Russian Federation.

Collective Order of Russian Ministries
55. “FAP-16”. Order 397 (2007) of the Government. About the improvement of state regulation of air carriers in air transportation.
56. “FAP-67”. Order 50 (2002) of the Ministry of Transport. Medical examination of air crew, dispatchers, flight attendants, pilot students, and entrants to schools of Civil Aviation.
57. “FAP-119”. Order 246 (2015) of the Ministry of Transport. Requirements to juridical persons, private entrepreneurs, who implement commercial air transportation.
58. “FAP-142”. Order 289 (2015) of the Ministry of Transport. Requirements to educational institutions and organizations preparing aviation specialists of proper level.
59. “FAP-145”. Order 285 (2015) of the Ministry of Transport. Requirements to juridical persons, private entrepreneurs, who implement maintenance of Civil Aviation aircraft.
60. “FAP-151”. Order 286 (2015) of the Ministry of Transport. Requirements to operators of Civil Aviation aerodromes.
61. “FAP-173”. Order 270 (1998) of the Federal Aviation Service. Radio communication support of aircraft flights and aircraft electrical communication. Certification requirements.

References
[1] Chernykh O and Bakiiev M 2016 Learning of Russian Aviation regulations by Chinese and international students Proc. Asian Workshop on Aircraft Design Education (Nanjing: Nanjing University of Aeronautics and Astronautics) pp 130–134
[2] Krasotkin A A 2007 Sertifikatsiya Aviatsionnoy Tekhniky [Certification of Aircraft] (Moscow: Moscow Aviation Institute) [in Russian]
[3] 27.03.1998 No.360 O Federal’nykh Pravilakh Ispol’zovaniya Vozdushnogo Prostranstva i Federal’nlykh Aviatsionnykh Pravilakh [About Federal Regulations of Airspace Use and Federal Aviation Regulations] Postanovlenie Pravitel’stva Rossii [Order of the Government of the Russian Federation] ed 18.02.2016 [in Russian]
[4] 2016 Interstate Aviation Committee http://www.mak-iac.org
[5] 2016 Government of the Russian Federation http://government.ru
[6] 2016 Ministry of Transport of the Russian Federation http://www.mintrans.ru
[7] 2016 Ministry of Defense of the Russian Federation  http://mil.ru
[8] 2016 Federal Air Transport Agency of the Russian Federation  http://www.favt.ru
[9] 2016 Unified System of Aviation Standards  http://esas.niisu.ru
[10] 2013 Aviatsionnye Pravila Chast’ 21 Sertifikatsiya Aviatsionnoy Tekhni, Organizatsiy Razrabotchikov i Izgotoviteley [Aviation Regulations Part 21 Certification Procedures for Aeronautical Products, Design Organizations and Manufacturers] (Moscow: Interstate Aviation Committee) [in Russian]
[11] 25.01.2016 No.11 Ob Otme ne Prikazov Ministerstva Transporta Rossiyskoy Federatsii [About Invalidation of Orders of the Ministry of Transport of the Russian Federation] Prikaz Ministerstva Transporta Rossiyskoy Federatsii [Order of the Ministry of Transport of the Russian Federation] [in Russian]
[12] 26.10.2015 No.316 Ob Otme ne Prikaza Ministerstva Transporta Rossiyskoy Federatsii ot 06.11.2014 No.308 [About Invalidation of the Order of the Ministry of Transport of the Russian Federation from 06.11.2014 No.308] Prikaz Ministerstva Transporta Rossiyskoy Federatsii [Order of the Ministry of Transport of the Russian Federation] [in Russian]
[13] 12.09.2008 No.147 Ob Utverzhdenii Federal’nykh Aviatsionnykh Pravil “Trebovaniya k Chlenam Ekipazha Vozdushnykh Sudov, Spetsialistam po Tekhnicheskomu Obshchenniyu Vozdushnykh Sudov I Sotrudnikam po Obespecheniyu Poletov (Poletnym Dispetcheram) Grazhdanskooy Aviatii” [About Ratification of Federal Aviation Regulations “Requirements to Air Crew Men, Aircraft Maintenance Engineers, and Flight Support Crew (Flight Dispatchers) in Civil Aviation”] Prikaz Ministerstva Transporta Rossiyskoy Federatsii [Order of the Ministry of Transport of the Russian Federation] ed 16.09.2015 [in Russian]
[14] 2016 Federal Aviation Administration http://www.faa.gov
[15] 2016 European Aviation Safety Agency https://www.easa.europa.eu
[16] 2016 International Civil Aviation Organization http://www.icao.int
[17] 29.09.2015 No.289 Ob Utverzhdenii Federal’nykh Aviatsionnykh Pravil “Trebovaniya k Obrazovatel’nym Organizatsiyam i Organizatsiyam, Osushchestvlyayushchim Obuchenie Spetsialistov Sootvetstvuyushchego Urovnya Soglasno Perechnym Spetsialistov Aviatsionnogo Personala” [About Ratification of Federal Aviation Regulations “Requirements to Educational Institutions and Organizations Preparing Aviation Specialists of Proper Level According to Aviation Specialist Lists”] Prikaz Ministerstva Transporta Rossiyskoy Federatsii [Order of the Ministry of Transport of the Russian Federation] [in Russian]
[18] 2014 Vozdushnoe Zakonodatel’stvo, Sbornik [Aerial Legislation, Collection] (Moscow: Aircraft Owners & Pilots Association) [in Russian]