EXPLANATORY MEMORANDUM TO

THE AVIATION SAFETY (AMENDMENT) REGULATIONS 2024

2024 No. [XXXX]

1. Introduction

1.1 This Explanatory Memorandum has been prepared by the Department for Transport and is laid before Parliament by Command of His Majesty.

1.2 This Explanatory Memorandum contains information for the Joint Committee on Statutory Instruments.

2. Declaration

2.1 Mike Kane MP , Parliamentary Under Secretary of State for Aviation, Maritime and Security at the Department for Transport confirms that this Explanatory Memorandum meets the required standard.

2.2 Jenny Ward, Deputy Director for Aviation Safety, Innovation and Skills, at the Department for Transport confirms that this Explanatory Memorandum meets the required standard.

3. Contact

3.1 Emily Lee at the Department for Transport, Telephone: 07977284994 or email: aviationsafety@dft.gov.uk, can be contacted with any queries regarding the instrument.

Part One: Explanation, and context, of the instrument

4. Overview of the Instrument

What does the legislation do?

4.1 This instrument amends assimilated law in relation to aviation safety and makes some consequential amendments to domestic aviation law. 'Assimilated law' is the term used to refer to what was previously called retained EU law, where it had not been revoked by the end of 2023.

4.2 The instrument is in three parts. The first part contains introductory provisions. The second part is designed to bring UK law into alignment with amendments to international law in the field of aviation safety as set out in Annexes 6 and 14 to the Convention on International Civil Aviation of 7 December 1944 ("the Chicago Convention"). The third part makes corrections and amendments to assimilated law.

4.3 Part Two, Chapter One introduces improved safety standards that allow aircraft to operate safely at lower aerodrome operating minima (criteria used by pilots to determine whether they may land or take off from any runway) where certain technology is available or new, improved processes are followed, or both. It also makes changes to allow general aviation to make use of instrument flight rules (which govern how pilots fly aircraft when visibility is limited). It also introduces new requirements in relation to checking altimeters and fuel schemes for commercial air transport which require fuel planning both pre- and in-flight to ensure sufficient fuel is available for flights to safely land, taking into account the loading of the aircraft, any potential deviations or other matters that could occur during flight.

4.4 Some of the provisions of assimilated law amended by regulations in Chapter One create obligations which are enforced by way of associated criminal sanctions set out elsewhere in domestic law (specifically, schedule 13 to the Air Navigation Order 2016 ("ANO 2016")). In some respects, where necessary due to the nature of the amendment, this has required consequential amendments to the ANO 2016 to reflect the offence as amended using powers in the Retained EU Law (Revocation and Reform) Act 2023 ("the REUL Act 2023"). These are set out in Part Two, Chapter Two.

4.5 Chapter Three makes improvements to the existing mandatory crew training and checking requirements for air operators. It addresses: initial and recurrent training and checking; the conditions for the operation on more than one aircraft type or variant; the acceptance of previous training and checking by non-commercial operators and multi-pilot operations of single-pilot certified helicopters.

4.6 Chapter Four introduces the regulatory requirements which are necessary to ensure the availability of aerodrome infrastructure (including meteorological equipment) and information and procedures to support the ability of aircraft to take off and land in an airport under low visibility conditions (referred to as "all weather operations"). The amendments also allow for the use of enhanced flight vision systems to the maximum extent possible.

4.7 Part Three of this instrument makes amendments to assimilated law to correct errors arising from the Aviation Safety (Amendment) Regulations 2023 ("the 2023 Regulations") and to further support the implementation of Safety Management Systems ("SMS"). Two provisions setting requirements for when an airworthiness review certificate must be sent to the Civil Aviation Authority ("CAA") are also included.

Where does the legislation extend to, and apply?

4.8 The extent of this instrument (that is, the jurisdictions which the instrument forms part of the law of) is England and Wales, Scotland and Northern Ireland.

4.9 The territorial application of this instrument (that is, where the instrument produces a practical effect) is England and Wales, Scotland and Northern Ireland. In addition, it applies to aircraft registered in the UK wherever they are.

5. Policy Context

What is being done and why?

5.1 The amendments made by this instrument have several purposes. This instrument introduces the regulatory requirements in line with international obligations (as explained below) necessary to:

a) introduce the concept of 'fuel schemes' for commercial air transport which will take into consideration the interrelationships of the operator's fuel planning policy, in-flight fuel management and the selection of aerodromes in order to enable greater operational efficiency;

b) enable a more performance-based approach with regard to the Final Reserve Fuel (the minimum fuel required for an aircraft to remain airborne safely), including moving some of the regulatory requirements to the CAA's Acceptable Means of Compliance ("AMC") and Guidance Material to give greater flexibility to operators;

c) address fuel issues specific to helicopter operations including clarifying and simplifying the rules for helicopter fuel planning. These are changes to address the safety-related issues of refuelling with passengers on board, embarking, disembarking, or refuelling with rotors turning;

d) allow for the use of new, advanced technology as well as new operational procedures to support all weather operations;

e) allow for the use of enhanced flight vision systems (airborne technology providing pilots with a better view of their surroundings) to the maximum extent possible;

f) allow for safe helicopter flights under instrument flight rules , using point-in-space approaches and departures (a global navigation satellite system-based procedure designed for helicopters only); and

g) improve the existing mandatory crew training and checking requirements for air operators including: initial and recurrent training and checking, the conditions for the operation on more than one aircraft type or variant, the acceptance of previous training and checking by non-commercial operators, and multi-pilot operations of single-pilot certified helicopters.

5.2 This instrument also makes amendments to requirements regarding initial aircraft airworthiness, to ensure alignment with Standards and Recommended Practices (SARPs) as adopted by the International Civil Aviation Organization (ICAO). These amendments are further to those made by the 2023 Regulations, which were made to implement SARPs set out in Annex 19 of the Chicago Convention. Those SARPs require organisations designing or producing aircraft, engines and components to implement an SMS. This instrument makes further amendments to support the implementation of the SMS. It also corrects errors that have come to the Department's attention following the 2023 Regulations being made, by amending the requirements for the content of the handbook and flight test operations manual that design organisations must provide to the CAA, amending specifications for when acceptable or alternative means of compliance may be used by organisations to establish compliance with relevant regulations, and replacing relevant CAA forms to clarify which forms should be used in particular situations. This will ensure confidence in the new requirements on organisations involved in the design or production of aeronautical products or parts to implement an SMS.

5.3 This instrument also amends requirements regarding continuing aircraft airworthiness. This is further to amendments in the 2023 Regulations, which were made to require maintenance organisations to implement an SMS to bring into effect ICAO Standards set out in Annex 19 to the Chicago Convention. This instrument corrects errors that have come to the Department's attention following the 2023 Regulations being made by amending the requirements for when a component certificate of release to service must be issued following maintenance, expanding which staff are included in derogations for certain qualification requirements where base maintenance is carried out at a location outside of the UK, and fixing incorrect cross-references to other legislative provisions. The amendments also reinstate legal requirements for those issuing or extending airworthiness review certificates to send them to the CAA within 10 days of completion. These requirements had been unintentionally removed by the Aviation Safety (Amendment) (EU Exit) Regulations 2020.

What was the previous policy, how is this different?

5.4 UK aviation safety policy is to implement international SARPs and Procedures for Air Navigation (PANs) in line with our international obligations.

5.5 SARPs and PANs provide ICAO Member States, including the UK, with the basis for harmonised global aviation safety and efficiency in the air and on the ground, the worldwide standardisation of functional and performance requirements of air navigation facilities and services, and the orderly development of air transport. The development of SARPs and PANs follows a structured process involving a number of technical and non-technical bodies which are either within, or closely associated with, ICAO.

5.6 SARPs are updated in line with latest developments and innovations to ensure regulatory systems take account of new and emerging technologies, and do not place unnecessary barriers in the way of innovation. The UK regularly updates its aviation safety policy to meet these standards.

5.7 The changes made by this instrument thus maintain the same overall policy ambition as stated above but the previous policy aligned with old ICAO SARPs, whereas this instrument updates it to comply with the latest ICAO SARPs.

5.8 For all weather operations the changes in SARPs relate to new definitions (e.g. aerodrome operating minima in case of 2D and 3D instrument approach operations, as well as certain principles such as operational credit(s)); the new classification of the instrument approach operations (as Type A and Type B) has also been included; and the definitions of 'decision altitude or decision height' as well as that of 'final approach segment' have been inserted.

5.9 For fuel planning schemes the new SARPs introduce procedures to determine necessary fuel required by setting out the interrelationship of in-flight fuel management with the preflight fuel calculation and selection of aerodromes as they depend on each other. The SARPs address the gaps identified in the in-flight fuel management policy to enable operators to benefit from the latest technologies.

5.10 In respect of SMS, the amendments are to ensure SMS requirements are implemented as intended. There is no change to policy.

6. Legislative and Legal Context

How has the law changed?

6.1 Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency ("the Basic Regulation"), as amended, establishes a framework and essential requirements in respect of aviation safety regulation. It provides for the implementation of the SARPs contained in the Annexes to the Chicago Convention.

6.2 The Basic Regulation, as assimilated in UK law, contains regulation making powers for the Secretary of State to make and amend detailed regulations in respect of aviation safety to ensure compliance with the essential requirements set out in the Annexes to, and the general objectives of, the Basic Regulation.

6.3 This instrument is made in exercise of the powers set out in the paragraphs 17(1), 19(1), 23(1), 27(1), 31(1), 39(1), 62(14) and (15) and 127(3) of the Basic Regulation. In addition (and discussed below) the instrument relies on powers set out in sections 12(1), 14(2) and (3) and 14(4)(c) of the REUL Act 2023.

6.4 Specifically, this instrument amends the following assimilated law:

a) Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations

pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council ("the Air Operations Regulation");

b) Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council ("the Aerodromes Regulation");

c) Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council ("the Aircrew Regulation");

d) Commission Regulation (EU) No 748/2012 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ("the Initial Airworthiness Regulation); and

e) Commission Regulation (EU) No 1321/2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel ("the Continuing Airworthiness Regulation").

6.5 The amendments to regulations mentioned in (a) to (c) above are to ensure compliance with relevant updated requirements for all weather operations, fuel planning and aircrew training as set out in Annexes 6 and 14 to the Chicago Convention and the amendments at (d) to (e) above are required to correct errors that were caused by the 2023 Regulations and make amendments to correctly implement the policy intention of the 2023 Regulations.

6.6 In addition, amendments are made to Schedule 13 to the ANO 2016 to remove or create new criminal sanctions which attach to obligations in the Air Operations Regulation. The Basic Regulation powers to make regulations do not include powers to make criminal sanctions. However, the regulation making powers impose obligations. In order to enforce those obligations prior to EU exit the UK relied on section 2(2) of the European Communities Act 1972. The repeal of that Act removed the powers to create or amend criminal sanctions relating to obligations in assimilated law other than the ability to remove a criminal offence using the consequential amendment power in section 127(3) of the Basic Regulation.

6.7 In order to amend the obligations in the Air Operations Regulation which have associated criminal sanctions in schedule 13 to the ANO 2016, the instrument relies on the powers in section 14 of the REUL Act 2023, specifically powers in section 14(2) to revoke any secondary retained EU law and replace it with such provision as may be appropriate to achieve the same or similar objectives and section 14(3) to revoke secondary assimilated law and make such alternative provision as the relevant national authority considers appropriate.

6.8 These powers are relied on only where a criminal sanction attaches to an amended EU obligation. Where a provision of the Air Operations Regulation merely makes amendment to a provision without an associated offence, Basic Regulation powers are relied on. This way the use of these REUL Act 2023 powers is limited to where strictly necessary to either revoke or replace an obligation to which a criminal offence attaches. In addition, where replacing an obligation to which a criminal offence attaches the power in section 14(4)(c) is relied on to create a new criminal offence that corresponds to, or is similar to, an offence previously created by secondary retained EU law.

6.9 In addition, some changes have been made to improve the transparency and accessibility of provisions in the Air Operations Regulation and to keep similar provisions together and as such section 12(1) of the REUL Act 2023, which provides power to restate any secondary assimilated law (as defined in section 12(2) of that Act) is relied on in that respect.

6.10 Section 14(5) of the REUL Act 2023 states that where changes are made to secondary assimilated EU law using section 14 of the REUL Act, the overall effect of the changes made by it under that section (including changes made previously) in relation to that subject area should not increase the regulatory burden. Most section 14 powers used in this instrument are used to create equivalent criminal offences to those that already exist. Therefore, DfT considers that the changes being brought by amending and replacing provisions where a criminal offence is attached do not increase the overall regulatory burden on industry or the aviation safety regime more widely.

6.11 Both the Initial Airworthiness and Continuing Airworthiness Regulations are also being amended by powers contained within the Basic Regulation, following from earlier amendments made by the 2023 Regulations.

6.12 Regulations 22 to 24 amend the Initial Airworthiness Regulation. The requirements for the content of the handbook and flight test operations manual which design organisations must provide to the CAA when applying for design organisation approval has changed to specify what must be included when flight tests are to be conducted. These requirements had been inadvertently removed by the 2023 Regulations. Provisions have been amended or inserted to clarify when, in relation to production without production organisation approval and approval of production organisations, the CAA may use AMC to establish compliance with the Initial Airworthiness Regulation and the Basic Regulation, and when an organisation can use alternative means of compliance. A provision regarding the use of AMC has also been deleted in relation to type certificates, as it was not relevant. Lastly, versions of CAA Forms 15A and 15C (Airworthiness Review Certificates) have been substituted to ensure clarity regarding which forms are to be used. This clarifies a previous substitution in the 2023 Regulations which referred to a non-existent Form 15.

6.13 Regulations 25 to 28 amend the Continuing Airworthiness Regulation. The requirements for when a component certificate of release to service must be issued following maintenance have been clarified. The list of staff included in derogations for certain qualification requirements where base maintenance is carried out in a location outside of the UK has been amended to include certifying staff. Incorrect cross-references to provisions which did not exist have also been corrected. Legal requirements for those issuing or extending airworthiness review certificates to send them to the CAA within 10 days of completion have also been reinstated. These requirements had been unintentionally removed previously.

6.14 Under existing legislative provisions, where there is a failure to comply with applicable airworthiness requirements, the CAA must take action to either revoke, limit or suspend relevant approvals, or grant an appropriate corrective action period. Which of these is appropriate will depend on the nature and circumstances of the non-compliance.

Why was this approach taken to change the law?

6.15 This is the only possible approach to make the necessary changes.

7. Consultation

Summary of consultation outcome and methodology

7.1 There have been two consultations on all weather operations and fuel/energy planning and management.

7.2 While still a member of the EU Aviation Safety agency (EASA), the UK participated in work with EASA to develop the all weather operations and fuel energy planning and management tasks. These tasks were subject to consultation through the EASA Notice of Proposed Amendment and the outputs of the consultation were: a) Commission Implementing Regulations (EU) 2021/2227 (for Flight Crew Licensing); b) Commission Implementing Regulations 2021/2237 and 2021/1296 (for Air Operations); and c) Commission Delegated Regulations 2022/208 (for Aerodromes). Interested UK stakeholders played a significant part in the development of these tasks.

7.3 The CAA then consulted industry and the wider public on the proposed amendments to the Air Operations Regulation, the Aircrew Regulation and the Aerodromes Regulation between 24 April 2023 and 25 May 2023. The CAA received 30 comments from 10 responders to the consultation. Overall, the responses were generally supportive of the proposals which were the subject of consultation. The following points were raised and have been considered by the CAA:

a) The consultation responses sought clarification in respect of certain qualification requirements, which the CAA will clarify in guidance material in due course.

b) Some responses commented on the clarity of the proposed language of the regulations, which has been addressed with DfT where it is considered appropriate and necessary in the course of SI drafting. However, some comments were raised on the proposed language of certain requirements which the CAA does not consider should be amended because it is clear, necessary, and in some cases aligned with internationally agreed language.

c) The consultation responses queried a proposed increase in weather limits and a requirement relating to the minimum Runway Visual Range for helicopters, but it is not proposed that these should be amended following consultation as they are necessary as specified.

d) The consultation responses suggested that the UK should adopt Point In Space (PinS) operations for helicopters. The CAA does not consider that these requirements should be introduced at this time, but remains open to engaging with operators on this issue.

7.4 The CAA has taken all responses into account in producing its Opinion under Article 76 of the Basic Regulation which requires the CAA to assist DfT to prepare proposals to amend regulations. The actions summarised above have been taken and are set out more fully in the Consultation Response Document which can be found on the CAA's website[1].

7.5 There has been no consultation on the changes made in Part Three of this instrument because those changes arose from work on the implementation of ICAO SARPs and general safety enhancements undertaken by EASA while the UK was a member of the EU. Further information on previous consultations can be found in the Explanatory Memorandum to the Aviation Safety (Amendment) Regulations 2023[2].

[1] All Weather Operations and Fuel/Energy Planning and Management - Civil Aviation Authority - Citizen Space
[2] The Aviation Safety (Amendment) Regulations 2023 (legislation.gov.uk)

8. Applicable Guidance

8.1 The CAA will also develop AMC, Guidance Material and Certification Standards necessary to support the implementation of any changes to the Air Operations Regulation, the Aircrew Regulation, or the Aerodromes Regulation. These will be published as close to the laying of the SI as possible. All approved and published UK civil aviation safety regulations alongside Guidance Material are stored on the CAA website[3]. No new guidance will be developed for Amendments which are corrections.

Part Two: Impact and the Better Regulation Framework

9. Impact Assessment

9.1 A full Impact Assessment (IA) is submitted with this memorandum and published alongside the Explanatory Memorandum on the legislation.gov.uk website. This assesses the impact of amending existing legislation to align with the latest ICAO SARPs concerning fuel planning and management, with an equivalent annual net saving to business of £7.6m each year across a 10-year appraisal period. More details are provided in the full IA.

9.2 An IA has not been published for the amendments enabling all weather operations as the equivalent annual net direct impacts on business have been assessed at under £5m per year. Instead, a De Minimis Assessment (DMA) has been prepared. The proposed amendments are expected to lead to annual net direct costs of £0.1m. These costs consist of staff time to familiarise organisations with the new regulations, management costs, additional training costs for pilots, equipment costs, and aerodrome implementation costs. The proposed amendments are expected to lead to average annual benefits of £0.1m. However, other benefits have not been monetised; these primarily come in the form of enhanced safety outcomes for aircraft and are expected to be significant.

9.3 A second DMA has been prepared on the reinstatement of the requirements for those issuing or extending airworthiness review certificates to send them to the CAA within 10 days. There are no monetised costs or benefits to this policy and any familiarisation or admin costs will be extremely small or negligible. Businesses are already familiar with the existing Regulations, and the amendments proposed are extremely minor and do not apply to the majority of approved organisations.

Impact on businesses, charities and voluntary bodies

9.4 The impact on businesses of updating existing legislation to align with the latest ICAO SARPs concerning fuel planning and management yields a net benefit of £10.1m across a 10-year appraisal period. Operators who choose to implement one of the new fuel schemes are expected to benefit from fuel load savings by an estimated £12.3m across all operators, and it is expected that Air Operator's Certificate holders will experience transition costs through familiarisation costs and operations administration and management costs, estimated at £2.2m.

9.5 The legislation does impact small or micro businesses.

9.6 No specific action is proposed to minimise regulatory burdens on small or micro businesses. Some of the businesses that are expected to implement Basic Fuel Schemes with Variations only are understood to have fewer than 50 employees, although the majority employ between 51 and 200 individuals. The decision by some operators to implement Individual Fuel Schemes may have a negative impact on other

[3] UK Regulations | Civil Aviation Authority (caa.co.uk)

operators and these organisations will be placed at a competitive disadvantage relative to larger operators. However, the risk of this is thought to be low since this disadvantage would only be realised in a situation where two operators are flying the same route, one using a Basic Fuel Scheme or a Basic Fuel Scheme with Variations and the other using an Individual Fuel Scheme.

9.7 There is no, or no significant, impact on the public sector because current costs to Government will remain post SI implementation.

10. Monitoring and review

What is the approach to monitoring and reviewing this legislation?

10.1 Aviation safety legislation is subject to regular review through which necessary and appropriate amendments are identified. These reviews take place on a far more frequent basis than the five-year interval required under the Post Implementation Review clause, with meetings of the Aviation Legislation, Policy and Sponsorship Group (ALPS), which review the impacts of any regulatory changes, occurring multiple times a year. The nature of aviation means that more regular reviews are appropriate, as legislation may need to be updated on a more frequent basis including in response to changes in SARPs and other developments. Regulatory impact is considered as part of this process, and advice given by the CAA takes into account the Growth Duty on regulators, which requires regulators to "consider the economic consequences of their actions; be proportionate in their decision making; and to keep regulatory burdens to a minimum".

10.2 In addition to regular reviews by ALPS, DfT analysts will conduct a non-statutory review in relation to fuel schemes in five years as set out in the Impact Assessment.

10.3 The instrument does not include a statutory review clause and, in line with the requirements of the Small Business, Enterprise and Employment Act 2015, Mike Kane MP, Parliamentary Under Secretary of State, has made the following statement:

"In my view, in line with the requirements of the Small Business, Enterprise and Employment Act 2015, the provisions of the Aviation Safety (Amendment) Regulations 2024 are such that a statutory review clause would be inappropriate, for proportionality reasons, given the costs associated with such a review and the limited scope for change."

Part Three: Statements and Matters of Particular Interest to Parliament

11. Matters of special interest to Parliament

11.1 The Department has become aware that corrections to the Initial Airworthiness and Continuing Airworthiness Regulations are needed, following on from amendments made by the 2023 Regulations. As this instrument is correcting errors in the 2023 Regulations, a copy will be issued free of charge to all known recipients of those Regulations.

11.2 The unintended omissions or errors resulting from the 2023 Regulations could have caused confusion as they introduced irregularities and inconsistencies, which impact the ease of use of the regulations by the industry. This could have safety consequences as the confusion could lead to human factor-related safety issues as a result.

11.3 The requirements for the content a design organisation must include in a flight test operations manual when conducting flight tests were inadvertently removed. This meant there was no requirement regarding the processes and procedures to be in place before the conduct of a flight test. A flight test is an inherently hazardous activity and there is a clear need for processes and procedures to adequately ensure safety is preserved. This instrument reinstates these requirements.

11.4 A revised Explanatory Memorandum has been laid at the request of the SLSC. Paragraph 7.4 has been updated to reflect that the CAA has now published the Consultation Response Document (CRD) on all weather operations and fuel/energy planning management. A link to the CRD has also been included.

11.5 Some minor, typographical errors have been identified in this instrument. A correction slip will be issued to correct these errors.

12. European Convention on Human Rights

12.1 Mike Kane MP, Parliamentary Under Secretary of State has made the following statement regarding Human Rights:

"In my view the provisions of the Aviation Safety (Amendment) Regulations 2024 are compatible with the Convention rights."

13. The Relevant European Union Acts

13.1 This instrument is made, in part, under sections 12(1), 14(2) and (3) and 14(4)(c) of the REUL Act 2023 and therefore relates to the reform of assimilated law. The restatement powers in section 12(1) are used to move similar provisions together to improve the transparency and accessibility of provisions in the Air Operations Regulation. The powers in section 14 are used to amend the obligations in the Air Operations Regulation (see section 7 for more information) by revoking and replacing an obligation, and where a criminal offence attaches to that obligation, creating a new criminal offence that corresponds to, or is similar to, an offence previously created by secondary retained EU law. It is therefore subject to the affirmative procedure and therefore no Ministerial Statement relating to sifting is required.