

## **Explanatory Statement**

### **Civil Aviation Safety Regulations 1998**

#### **CASA EX60/20 – CRS and SM CRS Document to Cover Specialist Maintenance by a Class D AMO – Instrument 2020**

##### **Purpose**

The purpose of this instrument is to use an exemption to expedite the modification and simplification of certain legislative procedures and thereby allow for the more flexible and effective use of certain specialist maintenance organisations by aircraft maintenance organisations. Eventually, these modifications will be provided for in amendment regulations and the temporary expedient of the exemption will no longer be required.

The outcome will achieve greater consistency between the CASA requirements and the equivalent EASA requirements.

##### **Legislation — exemptions**

Subpart 11.F of CASR deals with exemptions. Under subregulation 11.160 (1) of the *Civil Aviation Safety Regulations 1998 (CASR)*, and for subsection 98 (5A) of the *Civil Aviation Act 1988 (the Act)*, CASA may, by instrument, grant an exemption from a provision of CASR in relation to a matter mentioned in subsection 98 (5A). Subsection 98 (5A) matters are, in effect, those affecting the safety, airworthiness or design of aircraft.

Under subregulation 11.160 (2), an exemption may be granted to a person or a class of persons. Under subregulation 11.160 (3), CASA may grant an exemption on application, or on its own initiative. For an application for an exemption, CASA must regard as paramount the preservation of an acceptable level of safety.

For making a decision on its own initiative, CASA is guided by the requirement in subsection 9A (1) of the Act that in exercising its powers and functions CASA must regard the safety of air navigation as the most important consideration.

Under regulation 11.205 of CASR, CASA may impose conditions on an exemption, if necessary in the interests of the safety of air navigation. Under regulation 11.210 of CASR, it is a strict liability offence not to comply with the obligations imposed by a condition. Under regulation 11.225 of CASR, CASA must, as soon as practicable, publish on the Internet details of all exemptions under Subpart 11.F.

Under subregulation 11.230 (1) of CASR, an exemption (but not an exceptional circumstances exemption for regulation 11.185 of CASR about major emergencies) may remain in force for 3 years or for a shorter period specified in the instrument.

Under subregulation 11.230 (3), an exemption, in force in relation to a particular aircraft owned by a particular person, ceases to be in force when the aircraft ceases to be owned by that person. Under regulation 11.235 of CASR, an exemption is not transferable (as between operators, aircraft etc.).

**Legislation — Directions**

Under subregulations 11.245 (1) and (2) of CASR, CASA may by instrument issue directions about any matter affecting the maintenance of aircraft if CASA is satisfied that it is necessary to do so in the interests of the safety of air navigation.

**Legislation —Part 42 of CASR**

Section 98 of the Act empowers the Governor-General to make regulations for the Act and the safety of air navigation.

Under subregulation 42.725 (1) of CASR, if an individual carries out maintenance on an aircraft on behalf of an approved maintenance organisation (**AMO**), the organisation must not release the aircraft to another person unless the organisation has issued a certificate of release to service (**CRS**) for the aircraft in relation to the maintenance. Under subregulation 42.725 (2), an AMO commits an offence if the AMO has not issued a CRS for the aircraft in relation to the maintenance before releasing the aircraft to another person.

Under subregulation 42.730 (1) of CASR, if maintenance was carried out on an aircraft **on behalf of** an AMO, the organisation may issue a CRS for the aircraft in relation to the maintenance. Under subregulation 42.730 (2), the AMO must ensure that the certificate is issued on behalf of the organisation by an individual who is a certifying employee of the organisation, and whose certification authorisation permits him or her to issue the certificate for the aircraft in relation to the maintenance.

Under paragraph 42.745 (a) of CASR, for the issue of a CRS for an aircraft in relation to maintenance carried out on the aircraft the certificate must comply with regulation 42.760 of CASR.

Under paragraph 42.760 (1) (c), a document is a CRS for an aircraft in relation to maintenance carried out on the aircraft only if it includes the following information, if the maintenance was carried out by an AMO: the organisation's approval certificate reference number and the certification authorisation number of the employee issuing the certificate.

**Legislation — Part 145**

Under paragraph 145.A.50 (a) of the Part 145 Manual of Standards (the **Part 145 MOS**, made under Part 145 of CASR), an AMO must issue a CRS for an aircraft or aeronautical product for which it provides maintenance services in accordance with Part 42 of CASR.

Under subparagraph 145.A.55 (c) 2 of the Part 145 MOS, the AMO must keep a copy of all aircraft maintenance records, for 2 years and in accordance with regulation 42.410; and if the records are kept in electronic form, a back-up electronic record of the information must be kept in a location separate to the original.

Under the Part 145 MOS (including clause 5 of Appendix I, and Tables 1 and 2), a Category A rated AMO (a **CAT A AMO**) may carry out aircraft maintenance as specified in accordance with maintenance data for the aircraft. An A rating also permits the CAT A AMO to provide maintenance services for **specialist maintenance** without holding the Category D rating, provided that such maintenance is included under the Category A rating scope of approval. Category A class ratings are subdivided into base

or line maintenance and the AMO may be approved for either base or line maintenance or both.

Under the Part 145 MOS (including clause 8 of Appendix I, and Tables 1 and 2), a Category D rated AMO (a **CAT D1 or D2 AMO**) may provide maintenance services for **specialist maintenance** on an aircraft or an aeronautical product without holding a Category A rating for aircraft maintenance or a Category B or C rating for aeronautical product maintenance. (The privileges of a CAT D1 or D2 AMO are for non-destructive testing (**NDT**) and welding, respectively, colloquially described as “on-wing maintenance” when these maintenance services are provided to a CAT A AMO.)

### **Background**

The overall effect of the provisions mentioned above is that a CAT A AMO cannot use a CAT D1 or D2 AMO to issue a CRS for the specialist maintenance which such CAT D1 or D2 AMO specialises in.

This results in a lack of flexibility for a CAT A AMO to use a CAT D1 or D2 AMO, and a lack of ability of a CAT D1 or D2 AMO to be so used for specialist maintenance required during scheduled aircraft line and base maintenance.

No additional aviation safety risks would arise from a properly controlled and accountable use of such a CAT D1 or D2 AMO if a CAT A AMO were to be capable of fully recognising, taking into account and basing its own certificate of release on, the CAT D1 or D2 AMO’s certificate.

This inflexible outcome is at variance with the flexibility provided under equivalent maintenance rules of the European Union Aviation Safety Agency (**EASA**). It is CASA’s intention that these rules should be more closely harmonised with the EASA equivalents. However, this is part of a broader reform project and, given its size and complexity, and the limited drafting resources in the Office of Parliamentary Counsel, the exemption instrument has been made to provide appropriate relief on a temporary basis, for 3 years, until relevant amendment regulations and a consequential MOS amendment can be made.

The solution adopted has been to exempt a CAT A AMO and its contractor CAT D1 or D2 AMO from those provisions of Part 42 of CASR which prevent the CAT D1 or D2 AMO’s certification process from being fully recognised in the process of the CAT A AMO issuing its CRS for an aircraft after maintenance.

### **The exemption instrument**

To achieve the objective, while preserving appropriate safety, control and accountability for the conduct of aircraft maintenance, and in particular, preserving the integrity of the critical process of issuing a CRS, the exemption instrument is, of necessity technical and intricate. It is explained below.

It is important to note that the respective AMOs are exempted only from the specified provisions, and all of the other relevant provisions of Part 42 of CASR and of the Part 145 MOS continue to apply according to their terms.

#### 4 **Application**

Under section 4 of the instrument, its applicability is restricted to a CAT A AMO for whom a CAT D1 or D2 AMO (as appropriate) has carried out specialist maintenance; and it correspondingly applies to that CAT D1 or D2 AMO.

#### 5 **Exemption — Category A rated AMO**

Under section 5, a **CAT A AMO** is exempted from the requirements of the provisions mentioned below. But this is only to the extent that the CAT A AMO's CRS for an aircraft in relation to line or base maintenance on the aircraft:

- may be taken to cover any specialist maintenance, in the form of NDT or welding, carried out by a CAT D1 or D2 AMO that has issued a *specialist maintenance certificate of release to service document* (an **SM CRS document**) to the CAT A AMO for that specialist maintenance; and
- may be issued although it may not be a CRS in accordance with regulation 42.760 of CASR only because of its reliance on the SM CRS document.

The exempted provisions are the following, as outlined above:

- (a) subregulations 42.725 (1) and (2) of CASR (which would otherwise prevent any adoption, by the CAT A AMO, of the CAT D1 or D2 AMO);
- (b) subregulation 42.730 (1) (which would prevent the CAT A AMO from relying on the CAT D1 or D2 AMO certificate);
- (c) paragraph 42.745 (a) — but only in relation to paragraph 42.760 (1) (c) in respect of the employees of the CAT D1 or D2 AMO who carried out the specialist maintenance (which would otherwise prevent the CAT A AMO from relying on the CAT D1 or D2 AMO certificate);
- (d) paragraph 42.760 (1) (c) — but only in respect of the employees of the CAT D1 or D2 AMO who carried out the specialist maintenance (which would otherwise prevent the CAT A AMO from relying on the CAT D1 or D2 AMO certificate);
- (e) subparagraph 145.A.55 (c) 2 of the Part 145 MOS, but only in respect of a CRS issued in compliance with this instrument (which relieves the CAT A AMO from the obligation to retain certain documents because an equivalent obligation is provided in the exemption instrument under a CASA direction).

#### 6 **Exemption — Category D1 or D2 rated AMO**

Under section 6, a **CAT D1 or D2 AMO** is exempted from the requirements of the provisions mentioned below. But this is only to the extent that, in accordance with this instrument, the AMO issues a CAT A AMO with an SM CRS document in relation to the specialist maintenance mentioned in paragraph 5 (1) (a).

The exempted provisions are the following:

- (a) subregulations 42.725 (1) and (2) of CASR (which would otherwise prevent the CAT D1 or D2 AMO from releasing an aircraft after specialist maintenance to the CAT A AMO);

- (b) paragraph 145.A.50 (a) of the Part 145 MOS (which would otherwise prevent the CAT D1 or D2 from issuing an SM CRS document mentioned above).

## **7 Direction**

Under section 7, each of the mutually involved AMOs must retain a copy of any document it issues, gives or receives under this instrument for a period of at least 24 months after the creation of the document. To avoid any doubt, a Note explains that these documents include the relevant maintenance contract between the parties, SM CRS documents, specialist maintenance records and Adverse Matters Reports (see Conditions, below under Schedule 1).

The mutually involved AMOs must also retain, for a period of at least 12 months after expiry or termination of the maintenance contract, a copy of its approved procedures and the other party's approved procedures.

## **8 Conditions**

Under section 8, Schedule 1 provides for Conditions.

- 1 A CAT A AMO and a CAT D1 or D2 AMO must each be approved in writing by CASA for the purposes of this instrument.

Note explains that it is unlikely that the requirements of aviation safety, including for effective coordination and control of relevant maintenance activities, could be achieved by a CAT D1 or D2 AMO without a permanent facility. CASA's website provides more information on acceptable means of compliance, explanatory materials and guidance.

- 2 There must be a written contract between the CAT A AMO that is carrying out the line or base maintenance, and the CAT D1 or D2 AMO, with respect to the specific specialist maintenance that the CAT D1 or D2 AMO is expected to deliver as part of that line or base maintenance.
- 3 On completion of the specialist maintenance, the CAT D1 or D2 AMO must make a detailed specialist maintenance record which records the following:
  - (a) the aircraft registration mark of the aircraft on which the specialist maintenance was carried out;
  - (b) the date and time when the specialist maintenance was completed;
  - (c) a detailed description of the specialist maintenance carried out, including reference to, for example, relevant work orders, contractual arrangements invoices;
  - (d) the part numbers and serial numbers for any parts installed on the aircraft in the course of the specialist maintenance;
  - (e) information which identifies the maintenance data for the specialist maintenance;
  - (f) the results of the specialist maintenance, the aircraft's consequential status, and any other related airworthiness information that would indicate a risk to aviation safety;

- (g) information which identifies, and allows the tracing of, specialist or significant equipment or tooling used for the specialist maintenance;
  - (h) the identity of each certifying employee responsible for the specialist maintenance, including the person's name, certification authorisation number and signature;
  - (i) the identity of the CAT D1 or D2 AMO under whose CASA approval rating the specialist maintenance was completed, including the approval certificate reference number;
  - (j) whether the specialist maintenance has all been completed in accordance with the relevant maintenance data;
  - (k) whether the CAT A AMO's work order included *prescribed limitations*, arising from the aircraft's instructions for continuing airworthiness (ICA) for the specialist maintenance; or the CAT A AMO's own instructions; and if so, what the prescribed limitations were;
  - (l) whether there are any known defects or non-conformances in relation to the specialist maintenance (whether or not they are within the prescribed limitations);
  - (m) a statement that identifies the document as a specialist maintenance record for the purposes of this instrument.
- 4 A relevant CRS issued by the CAT A AMO must comply with regulation 42.760 (other than paragraph 42.760 (1) (c)).
- 5 A relevant SM CRS document issued by the CAT D1 or D2 AMO must comply with the following provisions of CASR as if the provisions applied to the AMO:
- (a) regulation 42.745; and
  - (b) subregulation 42.760 (1) only.
- 6 The CAT D1 or D2 AMO must comply with subregulation 42.750 (1) of CASR:
- (a) as if it applied to the AMO; and
  - (b) as if the reference to a CRS was a reference to an SM CRS document.
- 7 An SM CRS document must be:
- (a) in an approved form as contained in the exposition of the CAT D1 or D2 rated AMO; or
  - (b) in another form:
    - (i) as contained in the exposition of the CAT D1 or D2 AMO; and
    - (ii) approved in writing by CASA; and
    - (iii) treated in the same way, and subject to the same requirements, as an approved form.
- 8 The CAT A AMO and the CAT D1 or D2 AMO must have written procedures, approved in writing by CASA, to ensure that:
- (a) the conditions are complied with; and
  - (b) there is proper coordination and control of all maintenance activities whose certification will rely on this instrument.

- 9 On completion of the specialist maintenance, **if:**
- (a) the specialist maintenance has all been completed in accordance with the maintenance data; and
  - (b) there are any known defects or non-conformances in relation to the specialist maintenance — the known defects or non-conformances are within all of the prescribed limitations (if any); and
  - (c) there is no airworthiness information about the aircraft’s status and the specialist maintenance results, arising from or during the course of the specialist maintenance, which would indicate a risk to aviation safety;
- then** the CAT D1 or D2 AMO must issue the CAT A AMO with a document that:
- (d) is an SM CRS document, whether it is so called, or is identified as a CRS for specialist maintenance issued under this exemption, or is given some other similar name or description; and
  - (e) includes the specialist maintenance record made under clause 3; and
  - (f) is signed by each person mentioned in paragraph 3 (h).
- 10 The written contract referred to in clause 2 must specify:
- (a) that the specialist maintenance must be carried out in accordance with the relevant maintenance data for the aircraft and any prescribed limitations; and
  - (b) that only a document that fully complies with the requirements of this instrument constitutes an SM CRS document; and
  - (c) **if** an SM CRS document cannot be issued because of any of the following (adverse matters):
    - (i) the specialist maintenance has not all been completed in accordance with the maintenance data;
    - (ii) there are known defects or non-conformances in relation to the specialist maintenance that are outside the prescribed limitations;
    - (iii) there is airworthiness information about the aircraft’s status and the specialist maintenance results, arising from or during the course of the specialist maintenance, which would indicate a risk to aviation safety;
- then** the CAT D1 or D2 AMO must, as soon as practicable, give the CAT A AMO a detailed report (an Adverse Matters Report) identifying and explaining the relevant adverse matters and including all of the information recorded in the specialist maintenance record; and
- (d) the CAT D1 or D2 AMO, and the CAT A AMO, must each provide the other with a copy of its approved procedures mentioned in clause 8.
- 11 The written contract referred to in clause 2 above is taken to include the terms of each work order from the CAT A AMO to the CAT D1 or D2 AMO.

### ***Legislation Act 2003 (the LA)***

As noted above, exemptions under Subpart 11.F of CASR 1998 are “for subsection 98 (5A)” of the Act, that is, for regulations which empower the issue of certain instruments, like exemptions, in relation to “(a) matters affecting the safe navigation and operation, or the maintenance, of aircraft”, and “(b) the airworthiness of, or design standards for, aircraft”.

The exemption is clearly one in relation to such maintenance matters. Under subsection 98 (5AA) of the Act, an exemption issued under paragraph 98 (5A) (a), for such matters, is a legislative instrument if expressed to apply in relation to a class of persons, a class of aircraft or a class of aeronautical products (as distinct from a particular person, aircraft or product).

The exemption applies to a class of persons (contracting CAT A AMOs and CAT D1 or D2 AMOs) and is, therefore, a legislative instrument subject to registration, and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA.

### **Consultation**

Exemptions from regulatory requirements are considered to be beneficial for those to whom they apply, who voluntarily elect to take advantage of them, and who comply with their conditions. It is, therefore, rarely necessary to engage in extensive public consultation on a proposed exemption. However, it is CASA's policy to consult in an appropriate way with those parts of the aviation industry most likely to avail themselves of, or be affected by, an exemption so that they may have the opportunity to comment on the possible or likely terms, scope and appropriateness of the exemption.

The exceptions to this are when matters are urgent, and when CASA considers that the relevant state of affairs as well as informal feedback suggests that consultation would add little if anything to the proposed solution but would delay its promulgation to those who need to plan to take advantage of it.

This beneficial outcome is clearly the case here. However, in this case, CASA has consulted through an initial industry-wide survey which identified relevant issues for remediation. This was followed by further consultation through the CASA Aviation Safety Advisory Panel (ASAP) which endorsed the industry representatives technical working group's (*TWG*) unanimous earlier approval of what CASA had proposed. The TWG has also been consulted on a draft of the instrument, and on relevant acceptable means of compliance, explanatory materials and related guidance.

### **Office of Best Practice Regulation (OBPR)**

A Regulation Impact Statement (*RIS*) is not required because the exemption instrument is covered by a standing agreement between CASA and OBPR under which a RIS is not required for an exemption (OBPR id: 14507).

### **Statement of Compatibility with Human Rights**

The Statement in Appendix 1 is prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*. The exemption instrument is compatible with human rights and, to the extent that the instrument engages certain of these rights, it does so in a way that is reasonable, necessary and proportionate, does not adversely affect aviation safety and, as far as practicable, promotes rather than limits those rights.

### **Commencement and making**

The exemption commences on the day after it is registered and is repealed at the end of 30 April 2023.

It is intended that, as soon as is practicable before 30 April 2023, the exemption instrument will be replaced with amendments to Parts 42 and 145 of CASR and consequential amendments to the Part 42 and Part 145 Manuals of Standards. However,

the expedition with which this can occur is a function of the availability of subject matter experts and drafting instructors in CASA, legislative drafters in both CASA and OPC, the duration and emergency effects and consequences of the current coronavirus pandemic, and the priority which can realistically be given to the project. The proposal for the exemption instrument did not originate as a COVID-19 related measure, but it is inevitable, first, that it may be used to mitigate some of the effects of the pandemic on the aircraft maintenance industry and, secondly, that the pandemic itself will delay its conversion into regulation and Manual of Standards amendments.

The exemption has been made by the Director of Aviation Safety, on behalf of CASA, in accordance with subsection 73 (2) of the Act.

## Statement of Compatibility with Human Rights

*Prepared in accordance with Part 3 of the  
Human Rights (Parliamentary Scrutiny) Act 2011*

### **CASA EX60/20 – CRS and SM CRS Document to Cover Specialist Maintenance by a Class D AMO – Instrument 2020**

This legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

#### **Overview of the legislative instrument**

The purpose of this instrument is to use an exemption to expedite the modification and simplification of certain legislative procedures and thereby allow for the more flexible and effective use of certain specialist maintenance organisations by aircraft maintenance organisations. Eventually, these modifications will be provided for in amendment regulations and the temporary expedient of the exemption will no longer be required.

The outcome will achieve greater consistency between the CASA requirements and the equivalent EASA requirements.

The effect of certain provisions in Part 42 of the *Civil Aviation Safety Regulations 1998 (CASR)* and the Part 145 Manual of Standards, is that a CAT A AMO cannot use a CAT D1 or D2 AMO to issue a certificate of release to service (**CRS**) for the specialist maintenance which such CAT D1 or D2 AMO specialises in (non-destructive testing (**NDT**) and welding). This results in a lack of flexibility for a CAT A AMO to use a CAT D1 or D2 AMO, and a lack of ability of a CAT D1 or D2 AMO to be so used for specialist maintenance required during scheduled aircraft line and base maintenance. This inhibits the flexible use of the specialist maintenance organisations.

No additional aviation safety risks would arise from a properly controlled and accountable use of such a CAT D1 or D2 AMO if a CAT A AMO were to be capable of fully recognising, taking into account and basing its own CRS on, the CAT D1 or D2 AMO's certificate.

The lack of flexibility in use of the specialist maintenance organisations is at variance with the flexibility provided for under equivalent maintenance rules of the European Union Aviation Safety Agency (**EASA**). It is CASA's intention that its rules should be more closely harmonised with the EASA equivalents. However, this is part of a broader reform project and, given its size and complexity, and the limited drafting resources in the Office of Parliamentary Counsel, the exemption instrument has been made to provide appropriate relief on a temporary basis, for 3 years, until relevant amendment regulations and a consequential MOS amendment can be made.

The solution adopted has been to exempt a CAT A AMO and its contractor CAT D1 or D2 AMO from those provisions of Part 42 of CASR which prevent the CAT D1 or D2

AMO's certification process from being fully recognised in the process of the CAT A AMO issuing its CRS for an aircraft after maintenance.

### **Human rights implications**

The exemption instrument may engage the following human rights:

- the right to life under Article 6 of the International Covenant on Civil and Political Rights (the *ICCPR*)
- the right to safe and healthy working conditions under Article 7 of the International Covenant on Economic, Social and Cultural Rights (the *ICESCR*)
- the right to work under Article 6 (1) of the ICESCR.

#### ***Right to life under the ICCPR***

#### ***Right to safe and healthy working conditions under the ICESCR***

#### ***Right to work under the ICESCR***

The lack of flexibility which prevents the early deployment of specialist maintenance organisations capable of safely conducting relevant maintenance may delay operator access to certain specialist maintenance, may delay the availability of certain aircraft for operations and may restrict the employment opportunities of specialist maintenance organisations and their employees.

By providing for more flexible access to the work of specialist maintenance organisations, specialist maintenance may be completed sooner and quicker, aircraft may become available for operations sooner and employment opportunities for specialist maintenance organisations and their employees will become available.

While the nature and quality of the maintenance activity carried out will not be any safer than it would otherwise be, the 3 rights listed above may be engaged. First, the right to life may be engaged on behalf of certain aircraft operators whose aircraft may become available for important operations, including emergency, medical or other safety flights, sooner than might otherwise be the case. Secondly, the rights to work and to safe and healthy working conditions, may be engaged on behalf of certain specialist maintenance organisations and their employees who might not otherwise have the opportunity to be engaged in this professionally enhanced way.

### **COVID-19**

The COVID-19 pandemic has given rise to the need to observe Australian Government social distancing rules to prevent people contracting or spreading the virus. These rules apply to all, including to protect the life, health and safety of personnel engaged in aviation operations and associated activities like training.

The proposal for the exemption instrument did not originate as a COVID-19 related measure. However, it is inevitable that it may be used to mitigate some of the effects of the pandemic on the aircraft maintenance industry by making available a somewhat larger pool of personnel, skilled in certain forms of specialist aircraft maintenance (NDT and welding). This could have the effect of supporting social distancing rules by enabling different locations and different personnel to be used for relevant maintenance.

It is also possible that the consequences of the pandemic may delay conversion of the exemption instrument in amendment regulations and revised Manuals of Standards. However, this delay, *as such*, would have no effect on either aviation safety or human

rights as the exemption instrument in its scope and safety conditions is an effective substitute for such amendments or revisions.

**Human rights implications**

The exemptions in the legislative instrument are compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*. To the extent that the instrument engages certain of these rights, it does so in a way that is reasonable, necessary and proportionate, does not adversely affect aviation safety and, as far as practicable, promotes rather than limits those rights.

**Conclusion**

This legislative instrument is compatible with human rights, and to the extent that it engages certain rights it does so in a way that, as far as practicable, promotes rather than limits those rights.

**Civil Aviation Safety Authority**