

Civil Aviation Amendment Regulations 1999 (No. 2) 1999 No. 167

EXPLANATORY STATEMENT

Statutory Rules 1999 No. 167

(Issued by the authority of the Minister for Transport and Regional Services)

Civil Aviation Act 1988

Civil Aviation Amendment Regulations 1999 (No. 2)

Subsection 98 (1) of the *Civil Aviation Act 1988* (the Act) provides that the Governor-General may make regulations for the purposes of the Act and in relation to the safety of air navigation.

These regulations (the amending regulations) amend certain provisions of the *Civil Aviation Regulations 1988* (the Regulations) to provide for a new flight manual management system. The objective is to provide a simpler, more cost-effective and efficient system.

Before the commencement of the amending regulations, regulation 138 of the Regulations empowered the Civil Aviation Safety Authority (CASA) or an authorised person:

- * to approve, or authorise the issue of, flight manuals for aircraft and any subsequent alterations to those manuals; and
- * to prepare and issue flight manuals for Australian aircraft and any subsequent alterations to those manuals.

CASA had also the power (subregulation 138 (5)) to direct the holder of the certificate of registration for an Australian aircraft or its operator to make alterations to the aircraft's flight manual. The expression "flight manual" in the Regulations meant a manual approved or issued, and altered, under regulation 138. For a number of years, however, concerns had been expressed within the aviation industry and CASA about the effectiveness of the flight manual management system.

Under the new provisions:

- * the powers given to CASA and authorised persons under regulation 138 of the Regulations are revoked;
- * a flight manual for an aircraft is defined as:
 - the manual or other document (not being a placard) that, under the airworthiness standards applicable to the aircraft when it was originally type certificated, was required to be provided with the aircraft and to contain specific information and instructions; or
 - in those cases where, notwithstanding the applicable airworthiness standards, a flight manual was required to be issued under regulation 21.5 of the *Civil Aviation Regulation 1998* for an aircraft whose first flight occurred on or after 1 March 1979-that flight manual; and
- * where such a flight manual has been issued for an Australian aircraft, it is the responsibility of the holder of the certificate of registration for the aircraft to keep the manual up to date.

As a result of these amendments, an Australian aircraft for which a flight manual (as defined) was required to be issued, unless exempted from so doing, must (under regulation 139) carry that manual on board when flying. There is no equivalent obligation for an Australian aircraft where a flight manual was not so required to be issued for it.

The amending regulations insert a new Part 4C, which deals with flight manuals, into the Regulations. New regulation 54 in that Part sets out the new meaning of the expression "flight manual". New regulation 55 requires the holder of the certificate of registration for an Australian aircraft for which a flight manual has been issued to make changes to the manual in specified circumstances. The certificate holder is also required to notify CASA of the particulars of a change.

The amending regulations repeal regulation 138 but re-enact in amended form the provisions of that regulation that required the pilot in command of an aircraft to comply with the requirements etc. contained in the aircraft's flight manual. They also remove the need to apply for an exemption from the requirement under regulation 139 to have a flight manual on board an aircraft in flight, if the aircraft carries specified documents that provide all the information required to be contained in the flight manual. An aircraft is no longer required to carry the flight manual if it carries an operations manual that meets the requirements of the amended subregulation 139 (3).

The amending regulations provide for a transition period within which the flight manuals (within the new meaning of the expression) issued to Australian aircraft before the commencement of the amending regulations must be brought up to date. Until this is done or the transition period comes to an end, an Australian aircraft is not required to carry such a flight manual when flying if it has on board the manual issued or approved for the aircraft under regulation 138 as in force before the commencement of these regulations

The amending regulations commence on gazettal. Details of those regulations are attached

A copy of the Regulation Impact Statement (RIS) is also attached. The Office of Regulation Review has advised that the RIS is suitable for attachment to this Explanatory Statement.

ATTACHMENT

DETAILS OF THE AMENDING REGULATIONS

Regulation 1-Name of regulations

Regulation 1 names the amending regulations as the *Civil Aviation Amendment Regulations 1999* (No. 2).

Regulation 2-Commencement

Regulation 2 provides that the amending regulations commence on gazettal.

Regulation 3-Amendment of Civil Aviation Regulations 1988

Regulation 3 provides that Schedule 1 amends the *Civil Aviation Regulations 1988*.

Schedule 1-Amendments

Item 1-Amendment of subregulation 2 (1)

This item substitutes a new definition for the definition of "flight manual" in that subregulation. The new definition refers the reader to regulation 54 where the text of the definition is to be found.

Item 2-Amendment of subregulation 2 (1)

This item inserts definitions for the expressions "relevant airworthiness standards" and "relevant NAA".

Item 3-Insertion of new part

This item inserts Part 4C after Part IVB of the Regulations. Part 4C makes provision about flight manuals.

New Regulation 54-Meaning of flight manual

Subregulation 54 (1) defines "flight manual" for an aircraft as being:

* in a case where a flight manual for the aircraft was given to the aircraft owner under regulation 21.5 of the *Civil Aviation Regulations 1998*-that flight manual; or

* in any other case-any manual or other document (not being a placard) that, under the relevant airworthiness standards for the aircraft, must be provided with the aircraft and must contain:

- information about the limitations within which the aircraft is considered airworthy; and
- any other information and any instructions necessary for the safe operation of the aircraft.

Subregulation 54 (2) ensures that if a change is made to a flight manual under new regulation 55, a reference to the manual will refer to the manual as changed.

New Regulation 55-Changes to flight manuals for Australian aircraft

Regulation 55 applies only to the holder of the certificate of registration for an Australian aircraft that has been issued with a flight manual.

Under subregulation (1), the regulation so applies if the manufacturer of the aircraft or the holder of the type certificate to which the aircraft conforms has issued an instruction that the change must be made and the change has been approved by CASA or the relevant NAA for the aircraft (an expression defined in subregulation (7)).

Under subregulation (2), the regulation so applies if a modification conforming to a supplemental type certificate has been carried out on the aircraft or on an aircraft component fitted to the aircraft and the holder of the supplemental type certificate has issued an instruction to make the change which has been approved by CASA or the NAA that issued the supplemental type certificate.

Under subregulation (3), the regulation so applies if a modification that does not conform to a supplemental type certificate, but whose design has been approved by CASA or an authorised person under regulation 35 of the Regulations, has been carried out on the aircraft or on an aircraft component fitted to the aircraft and CASA or the authorised person has issued an instruction to make the change.

Under subregulation (4), the regulation so applies if CASA or an authorised person, for the purpose of ensuring the safety of air navigation, instructs the certificate holder in writing to make a change to the flight manual.

Subregulation (5) provides that the holder of the certificate of registration for the aircraft must make the change to the aircraft's flight manual within the period provided in the subregulation.

After making a change to the flight manual, the holder of the certificate of registration is also required, under subregulation (6), to notify CASA of the particulars of the change within 48 hours after the aircraft is flown for the first time after the change is made.

Item 4-Substitution of subregulation 138

This item replaces regulation 138 of the Regulations with a new regulation. The provisions of the previous regulation that gave to CASA power to approve the issue, and alteration, of flight manuals and power to issue and alter flight manuals for Australian aircraft have been repealed. The provisions of that regulation that required the pilot in command of an aircraft to comply with the requirements, instructions, etc. concerning the operation of the aircraft set out in the aircraft's flight manual have been re-enacted but extended to require also the pilot's compliance with such of those requirements etc. as are set out in any placard and/or other document that has, under the relevant airworthiness standards for the aircraft, been issued instead of a flight manual.

Item 5-Substitution of subregulation 139 (3)

Regulation 139 of the Regulations requires an Australian aircraft when flying to carry certain documents including its aircraft manual. Before the commencement of this item, subregulation 139 (3) empowered CASA to exempt an aircraft from the requirement to carry its flight manual if CASA was satisfied that the aircraft carried an operations manual, placards or other documents that provide all the data required to be contained in the flight manual. This item substitutes for subregulation (3) a new provision under which an aircraft is not required to carry its flight manual if it carries an operations manual that contains the data required to be included in the flight manual and does not contain anything that conflicts with those data.

Item 6-Insertion of new provisions This item inserts regulations 322 and 323 in the Regulations.

New regulation 322-Transitional: changes to flight manuals for Australian aircraft

This regulation provides for cases where, before the commencement of the amending regulations, instructions were issued for changes to be made to the flight manual of an Australian aircraft in the circumstances set out in subregulation 322 (1), (2) or (3).

Subregulation 322 (4) requires the holder of the certificate of registration for the aircraft to make the changes to the aircraft manual within 1 year after the coming into force of the regulation or, if another change is required under regulation 55 to be made to the manual before that date, before the other change is made.

Under subregulation 322 (5), the certificate holder must notify a change to CASA within 48 hours after the aircraft is flown for the first time after the change is made.

New **regulation 323-Transitional: documents to be carried in Australian aircraft**

This regulation provides that if a change or changes are to be made to an aircraft's flight manual under regulation 322, the aircraft is, up to the time when the change or changes are made or (in default) ought to have been made, not required to carry its flight manual when flying, if it carries on board the manual that, immediately before the commencement of the amending regulations, was the aircraft's flight manual (that is, the manual issued or approved by CASA under regulation 138 as then in force).

CIVIL AVIATION SAFETY AUTHORITY AUSTRALIA

Regulation Impact Statement

RIS 9803

Flight Manual Management Procedures

Amendments to Civil Aviation Regulations (CARs) 2, 138, and 139

New Civil Aviation Regulations 54 and 55

APPROVED

Issued by CASA's Regulatory Framework Program Office

November 1998

Background

On 30 January 1998 CASA issued for public consultation a Notice of Proposed Rulemaking (NPRM) 9801AW, which invited formal public comment on a draft proposal dealing with the management and administrative arrangements and procedures for flight manuals (FMs) for aircraft. The NPRM contained a proposal to revise the rules relating to, and the method of management of, the information that is required to be available in aircraft to the operating crew in the form of flight manuals, placards or other documents. An NPRM is CASA's preferred method of public consultation on proposed legislative changes.

CASA intends that the proposed system be brought into effect as soon as possible through amendments to the Civil Aviation Regulations (CARs). These amendments will subsequently be incorporated into the new Civil Aviation Safety Regulations (CASRs) which will progressively replace the CARs and Civil Aviation Orders (CAOs) over the next two to three years.

1. Problem

For a number of years, concerns have been expressed within the aviation industry and CASA over the effectiveness of the current FM management system.

These included:

- * difficulty in understanding the regulatory requirements;
- * the perceived imbalance between the resources applied and benefits obtained in CASA issuing individual aircraft flight manuals (AFMs), amendments and supplements;
- * the rationale or necessity of requiring an Australian AFM where none was required in the country of original certification;
- * the rationale or necessity of requiring existing AFMs or Pilot Operating Handbooks (POHs) to be modified to become an Australian AFM, by for example, changing calibrated airspeeds to indicated airspeed (and also the placard and instrument markings);
- * the necessity or otherwise of requiring operational performance information, not required by the airworthiness standards, to be incorporated in the Australian AFM;

- * industry and CASA reservations about the relevance and costs involved in incorporating Radio System Operating Limitations (RSOL) pages, which were introduced when most radio equipment used valves and high voltages, with potential for failure at high altitude;
- * frustration, expense and delays for an applicant seeking to have an Australian AFM approved by CASA; and
- * the significant drain on CASA resources in approving, storing and amending copies of individual AFMs

CIVIL AVIATION

2. Objectives

CASA instituted a project to review the current system and procedures, and develop recommendations for a system which would meet the following objectives:

- * Australian regulations and practices covering FMs that are aligned with those of ICAO and major National Airworthiness Authorities (NAAs), and to remove unique Australian requirements;
- * a clear division of responsibilities for industry and CASA;
- * a system that enables Certificate of Registration (C of R) holders for an Australian aircraft to maintain the currency of their AFM more cost-effectively and efficiently, without being dependent on CASA for the approval of, or directions to incorporate, amendments;
- * a system that provides for more efficient and cost effective administrative processes within CASA;
- * a system to ensure that CASA receives notification of changes to the aircraft limitations or conditions such as weight, speed or number of passengers as a result of foreign or local modifications or Supplemental Type Certificates (STCs); and
- * legislation to address FM management in a manner consistent with the work being conducted to revise all the Australian aviation safety regulations under the auspices of CASA's Regulatory Framework Program.

3. Options considered

Regulations require the pilot of a type certificated aircraft must be provided with the necessary information required to operate the aircraft safely.

Annex 8 to the Convention on International Civil Aviation addresses the airworthiness of aircraft. In Section 8 of Part II of Annex 8 there is the statement:

"Each aircraft shall be provided with a flight manual, placards or other documents stating the approved limitations within which the aircraft is considered airworthy as defined by the appropriate airworthiness requirements, and additional instructions and information necessary for the safe operation of the aircraft."

Thus the provision of a flight manual, (or placards or other documents in some circumstances), is an international requirement. The options for legislative change were limited to assessment of the procedures and administrative arrangements associated with flight manuals.

The four options identified were:

Option 1; retain the status quo by relying on the existing Australian regulations as they currently exist in the CARs and CAOs.

Option 2; adopt a system containing the best elements of the existing legislation and typical international practice.

Option 3: Wait until the full re-write into the CASRs of the existing Australian CARs and CAOs has been completed and implemented under the Regulatory Review Program, to include the flight manual management requirements and administrative arrangements.

Option 4; adopt the approach outlined in NPRM 9801AW which seeks to produce a much simpler system, harmonised as far as possible with the systems in the USA and other major aviation countries, which are regarded as current best practice.

4. Impact Analysis

General. All identified options would mainly impact on all persons holding a Certificate of Registration (C of R) for an Australian aircraft.

All options would also impact, to varying degrees, on pilots and on aviation related businesses involved in manufacturing, operating, maintaining or modifying aircraft, and in particular, persons in the aviation industry who have been appointed by CASA to issue Certificates of Airworthiness under CAR 24.

The impact of all options also extends to CASA personnel involved in the administration of the activities identified above.

Option 1. This was rejected outright because it would not address any of the known problems described at Section 1, nor achieve any of the objectives identified at Section 2. To retain the status quo would continue the frustration, delays and unnecessary cumbersome administrative procedures.

Option 2. This was rejected as it would only partially address the known problems described at Section 1, and not fully meet the objectives identified at Section 2. In particular, such a hybrid system would mean that the Australian system was unique compared to other major aviation countries, thus not meeting the harmonisation goal, and would impose unique requirements on the Australian industry. Such a system would still perpetuate some of the frustration, delays and unnecessary cumbersome administrative procedures.

Option 3. This was rejected due to the time-scale involved of some two to three years to complete the regulatory review. The immediate review and simplification of the flight manual processes has been assigned a high priority by the CASA Board, and is desired by CASA and the aviation industry urgently.

Option 4. Proceed with the development and introduction of revised Civil Aviation Regulations to give effect to the proposals contained in NPRM 9801AW, as modified by consideration of the responses to the NPRM as contained in the *Summary of Responses to NPRM 9801AW*.

The impact of each change introduced by the revised CARs under this option is identified individually in NPRM 9801AW which details and discusses each major regulatory change proposed.

The consequential amendments related to the bringing into effect of the revised flight manual CARs further describe the impact on existing practices and operations. The consequential amendments also identify which CARs and CAOs will be repealed, and which flight manuals issued under the repealed legislation will be "saved".

Ultimately, the CARs will be absorbed into the CASRs. The harmonisation sought through Option 4 would make this a simple process.

Cost benefits for option 4

Costs

The proposed changes will result in no additional costs to C of R holders who already subscribe to manufacturers' update services. Many C of R holders already subscribe to manufacturers' flight manual update service to obtain those amendments to be inserted in the AIM, formerly directed by CASA to be inserted, but not provided by CASA.

Some C of R holders would have to subscribe to a manufacturer's flight manual update service. However, for simple aircraft this is not expensive. It is often free to registered owners, or is less than \$100 per annum. In practice, there is very little change to flight manuals, placards or Pilots Operating Handbook (POHs) for old light aircraft.

Usually, the cost of any flight manual amendment or supplement required as the result of installation of a manufacturer's modification kit or an STC is included in the cost of the installation kit.

Some C of R holders may have to purchase a copy of the manufacturers or Type Certificate (TC) holder aircraft flight manual or POH if the original has been lost/misplaced when the unique Australian AFM issued under the old CAR 138 was adopted. However, this is considered inexpensive at less than \$100.

Benefits

The benefits of adopting the general approach outlined in this NPRM include:

- * Considerable time and cost savings to industry in not having to prepare unique Australian aircraft flight manuals, and supplying copies to CASA. Note that for new aircraft type certifications, a copy of the original certificated flight manual for the type will still need to be provided to CASA, and a commitment received from the Type Certificate holder to supply amendments to CASA as part of the continuing airworthiness arrangements.
- * Significant time and cost savings to industry where an AFM would not now be required because the information was approved in another form, eg., placards, by the certifying authority.
- * Simplification of paperwork associated with modifications to the radio systems.
- * Significant savings for CASA in not storing or amending individual AFMs in District Offices (16 in number) throughout Australia.
- * Significant staff savings for CASA in not issuing individual AFMs, supplements and amendments which have already been approved by the NAA of a nominated country.
- * Significant savings for CASA in not writing to C of R holders directing them to incorporate amendments which have already been approved by the NAA of a recognised country.

CASA cost-recovery revenue from former flight manual issue and amendment activity would be expected to decrease significantly. This would be, of course, be a direct saving to industry. The cost savings for CASA in human resource and storage requirements will be expected to offset this loss of revenue, and allow CASA to focus on more safety-related activity.

There is also undoubtedly a clear benefit to both industry and to CASA in relation to the changes associated with sport and recreational aviation, particularly the reduction in time consuming and costly administration associated with flight manuals for aircraft which do not meet civil design standards and hence do not require an approved aircraft flight manual, which is required under the current regulations. The proposals will allow CASA to direct its resources away from the administration of sport aviation activities and to concentrate its efforts on safety activities involving fare-paying passengers.

The use of an internationally harmonised approach as the basis for Australian requirements is also considered a step towards facilitating the importation of foreign aircraft into Australia and increasing the international acceptability of Australian manufactured aircraft and products.

5. Consultation

The initial development of the options was by a joint industry and CASA team of 12 members under the (then) CASA Regulatory Role Review Program. The project team was staffed with CASA officers, and industry personnel from the airlines, aircraft design, manufacturing and maintenance sectors tasked with striving to achieve consensus in making their regulatory recommendations. A number of meetings were held, the options explored and some recommendations developed. When this Program was revised in late 1997, the project was transferred to the CASA Airworthiness Branch to be progressed as an urgent "pothole" task (projects for legislative change proposals). Thus considerable industry consultation had therefore already occurred prior to the issue of the NPRM, and this industry comment was considered, and where appropriate, incorporated into the NPRM.

As part of the consultative process, on 30 January 1998, CASA released for public comment, *NPRM 9801AW - Flight Manual Management Procedures*. The availability of this was advertised in a significant number of Australian newspapers, and a copy of the NPRM was sent to approximately 48 target organisations and persons.

The NPRM was also made available on the CASA website and through a Fax-on-request service. This NPRM contained detailed proposals for legislative changes for the management and administration of aircraft flight manuals.

The period for public comment on the proposals contained in this NPRM closed on 2 March 1998. The main affected parties were identified in the NPRM.

CASA received 43 individual responses to the NPRM including many substantive and comprehensive submissions. In addition, other comments were received after the closing date, especially in response to an article in the CASA publication "*Aiming Higher*" of March 1998, which featured the CASA proposal. Approximately 117,000 copies of the *Aiming Higher* newsletters were sent out. Comments were received from aircraft operators, manufacturers and maintainers, as well as from CASA staff. As a consequence, some minor amendments were made to the original proposal. CASA will release, in conjunction with the making of the final rule, a "*Summary of Responses to NPRM 9801AW*" document that will summarise and discuss the comments received, and provide a detailed CASA response and a disposition in respect of each comment received. Thus the views of the affected parties have been thoroughly and comprehensively addressed.

A copy of *NPRM 9801A W*, the *Summary of Responses to NPRM 9801AW*, draft amended CARs, and draft Civil Aviation (Transition and Amendment) Regulations may be downloaded from the CASA web site (<http://www.casa.gov.au/rules/newrules>), or may be obtained from:

Post (no stamp required)

Reply Paid 744, NPRM Administration,

Regulatory Framework Program Office,

GPO Box 2005, CANBERRA ACT 2601

Phone (free call) 1800 687 342

Fax (free call) 1800 653 897

6. Conclusion and recommended option

Assessment of options

For the reasons given at Section 4, options 1,2 and 3 were rejected.

Option 4 is the CASA and industry preferred option and was adopted to proceed with the development and introduction of the new flight manual management and administration regulations as outlined in the *Background* and Section 4 above.

Option 4 was chosen because it is the only option that addressed the problems identified at Section 1 and achieves the objectives identified at Section 2.

Disposition of the Final Rule

Many comments were on specific topics whilst other comments were of a general nature. Most respondents supported the proposal in principle. All comments received were evaluated and, where appropriate, the suggestions incorporated. There has been wide acceptance by industry for the proposal.

7. Implementation and Review

A broad implementation strategy is contained in NPRM 9801AW. Draft legislation and associated transitional legislation {contained in Civil Aviation (Transitional and Amendment) Regulations}, has been developed to allow the proposals outlined in the NPRM to be implemented.

In addition, CASA is currently amending existing CASA procedures manuals where appropriate, to reflect the new legislation, and has developed comprehensive advisory material, in the form of a Civil Aviation Advisory Publication (CAAP) No. 54-1 (0) *Flight Manuals for Individual Aircraft* for the guidance of the aviation community and the general public. It is CASA's intention that both the procedures manuals and CAAP will be available at the commencement of the new legislation.

A national training program for CASA staff commenced in late July 1998. An industry education program is being developed and is scheduled to also commence in December 1998.

Monitoring and review of the new legislation is to be on a continuous ongoing basis, whilst monitoring and review of associated procedures manuals and the CAAP will be on an as required basis.