COMMISSION OF THE EUROPEAN COMMUNITIES

COM(90) 442 final Brussels, 27 September 1990

Proposal for a COUNCIL DIRECTIVE

on the harmonization of technical requirements and procedures applicable to civil aircraft

(presented by the Commission)

EXPLANATORY MEMORANDUM

The liberalisation process for aviation seeks to apply the principles
of the single market to air transport, the first set of measures have
already been adopted and the second set are in the process of
approval.

This liberalisation process requires a number of accompanying measures as recognised by the European Parliament which emphasised, in its Resolution of September 1987, the need for initatives in aviation safety.

This Directive addresses those aspects of aviation safety which relate to the airworthiness, operational approval and maintenance of aircraft, engines and other aircraft equipment, and has been developed in consultation with, and assisted by, the Joint Aviation Authorities (JAA) and Industry (Association Européenne des Constructeurs de Matériei Aérospatial, AECMA, and the Association of European Airlines, AEA).

2. The free movement of aircraft within the Community is currently restricted, mainly due to the differences in technical standards for aircraft certification, operation and maintenance.

This results in a considerable amount of technical work and, in many cases, costly modification when an aircraft is transfered between registers of the Member States. The differences in technical standards may also result in variations in safety levels for air transport between the Member States.

- 3. The Commission recognises that the liberalisation process for air transport, to prepare the industry for the internal market, must be supplemented by initiatives in aviation safety not only to maintain and improve current safety levels but also to enable the maximum benefit to be achieved from the Single Act, consistant with the minimum cost to the industry.
- 4. The Commission has been considering this problem for some time and recognises the possibility that, unless specific actions are taken, the increased competition could result in a downward pressure on safety standards towards a lower level within the Community. The objective of this Directive is to provide the framework to maintain the high general level of safety in Europe and for the standards in all Member States to achieve the highest levels currently attained within the Community.
- 5. Aviation safety is currently the reponsibility of the civil aviation authorities of the Member States. A large number of these authorities, including all the major european countries with large aviation interests both within and outside the Community, have established the Joint Aviation Authorities (JAA) organisation under the auspices of the European Civil Aviation Conference (ECAC) to develop a unified european approach to aviation safety and to minimise the differences between the ECAC member states.
- 6. The high level of safety of air transport in Europe is achieved through certification, the approval of operational and maintenance procedures, and the individuals and/or organisations reponsible for carrying out the procedures.

. .

r v

The JAA have been working for several years to develop European technical codes and procedures. (Joint Aviation Requirements — JARs). A number of these codes are currently complete, and have been issued, dealing mainly with the certification of aircraft, engines and other aviation products.

However, a comprehensive set of codes, to cover the whole range, has yet to be developed to cover operation, maintenance and the approval of individuals and organisations. Whilst work is continuing to develop these codes it will be some time before the process is finished.

7. The adoption of a single set of codes however, is not, in itself, sufficient to ensure a harmonisation of safety standards, due to differences in interpretation of the requirements, and differences in the technical resources of the individual national civil aviation authorities.

end the first of the second particles are also become

e al length of the bold of the second

entre de la final de la companya de

This harmonisation is best achieved, at this stage, through the creation of technical teams by the JAA, drawn from the authorities to carry out all the technical work on behalf of all the Member States. This will permit a more efficient use of the limited resources of the authorities of the Member States, and enable the smaller authorities to be sure that an adequate technical assessment has been carried out, whilst at the same time minimising the burden on the industry.

Such an approach should ultimately lead to the framework of a single European Aviation Authority thus ensuring total harmonisation of safety standards and consistency of their implementation. Whilst considering that such a result is highly desirable and is to be welcomed, it is not at this stage, an objective of the Commission.

The state of the s

However, it is considered that appropriate studies on the structure of such an organisation should be initiated.

and the second of the second o

the first of the company of the first first

8. The current effectiveness of the JAA could be limited by the fact that it is a purely voluntary arrangement, tacking a legal framework, and that not all EC States are currently members.

This Directive is almed at strengthening the JAA by making this voluntary arrangement binding by incorporating it into community legislation. This will require the Member States to adopt common codes of technical requirements and to adhere to the administrative requirements and procedures of the JAA.

The comprehensive set of codes of technical requirements above, is being developed and as the individual codes are completed they will be added to the directive through the use of a committee.

9. Many Member States, either through national research organisations or through their civil aviation authorities, carry out research work aimed at improving civil aviation safety. This work is rarely coordinated and consequently is not as effective as it could be.

All research work should be co-ordinated through the JAA to ensure maximum benefit from the relatively limited funds available.

10. The progressive development of a complete set of codes, and the continuous amendment of existing codes in the light of service experience and technical progress, will require a relatively frequent modification of Annex 2 of the Directive. To avoid an unacceptable burden being put on the Council by the submission of revised directives several times a year, it is proposed that the Commission is empowered to adopt these amendments with the assistance of a committee, which will make recommendations to the Commission. This Committee must be capable of understanding the technical reasoning behind the proposals and consequently it is anticipated that Member States will normally nominate Committee Members from their national aviation administration.

COMMENTS ON THE VARIOUS ARTICLES

Article 1

This Article sets the scope of the Directive.

Article 2

This Article lays down the necessary definitions.

Article 3

This Article lays down the common technical requirements and procedures to be adopted as sole national codes for the certification of the design, manufacture and maintenance of aviation products, operation of aircraft, and of the organisations, persons and services involved in these tasks. These codes will be adopted into community legislation through the procedures specified in Article 10, and are indicated in Annex 2. It recognizes that, until specific JAR codes are completed, Member States may continue to use the equivalent national code until the JAR code is adopted into community legislation.

This Article requires the Member States to ensure their civil aviation authorities adhere to the arrangements document.

The arrangements require the authorities to commit themselves to co-operate in all aspects related to the safety of aircraft, in particular its design, manufacture, continued airworthiness, maintenance and operation to ensure that a high consistent level of safety is achieved throughout the Member States, to avoid duplication of work between the authorities and to facilitate exchange of products, services and persons not only between the parties but also between the parties and others. This is achieved by the Member States joining the JAA to develop, adopt and implement Joint Aviation Requirements (JARs).

This Article also requires the Member States to take the necessary measures to enable the Community to participate in the JAA organisations.

Article 5

This Article establishes the mutual acceptance of aviation products that have been designed, manufactured, operated and maintained in accordance with the requirements of this Directive. It introduces a mechanism by which products that have not been certificated to the common requirements and procedures can achieve mutual recognition. This mechanism is a technical assessment, carried out by the JAA, to determine that the level of safety of the product is broadly equivalent to that required by the common requirements and procedures.

This Article establishes the mutual acceptance of the certification of organisations and persons, involved in the design, manufacture and maintenance of products and operation of aircraft, in accordance with the common requirements and procedures of this Directive.

Article 7

This Article recognizes that Member States may need to react immediately to a safety problem. In this situation the Member States involved shall inform the Commission immediately of the problem, the actions taken and the reasons for its decision, and identifying, if possible, whether the problem is non-compliance with the requirements, an inadequate requirement, or gap in the requirements.

The Commission shall consult with the Member States and the JAA to determine whether the actions taken are justified and if there is a need to revise the common requirements and procedures. In this case the Commission will ask the JAA to propose a new code, or changes to an existing one.

一声 1985 - 文文表 "李俊5年 1961" - 1986年 1965年 1965年 1965年 1965年 1967年 1967年 1967年 1

Article 8

Control of the Contro

Contract of the second second

This Article calls for the co-ordination, through the JAA, of civil aviation safety research within the Member States to improve the efficient use of resources and enable maximum benefit of such work to be realised. The Commission shall be informed of the measures taken to achieve co-ordination and may take any necessary initiatives to improve such co-ordination.

This Article provides the mechanism by which the Commission is notified of changes: either to the common requirements and procedures specified in Annex 2, in the form of a new JAR code or as a change to an existing one; or modifications to the arrangements specified in Annex 1.

Article 10

The Commission will adopt the changes notified in accordance with Article 9 into Community legislation through the use of a committee.

Where a new code, or change to an existing code, incorporates a national variant the Commission shall decide, following advice from the committee whether this national variant should be made applicable for all Member States, or not included in the common requirements and procedures.

Article 11

This Article lays down to the composition and procedures for the committee.

Article 12

Procedural Article

Article 13

Procedural Article

- 10 -

Proposal for a

COUNCIL DIRECTIVE

on the harmonization of technical requirements and procedures applicable to civil aircraft

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 84(2) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

Whereas it is important to adopt measures with the aim of progressively establishing the internal market over a period expiring on 31 December 1992 as provided for in Article 8(a) of the Treaty; whereas the internal market shall comprise an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured;

Whereas the current restrictions on the transfer of aircraft and aviation products between Member States would cause distortions to the internal market; whereas such restrictions are due to different safety provisions in the Member States:

Whereas safety is a basic provision of Community air transport; whereas according to the Convention on International Civil Aviation signed in Chicago on 7 December 1944, Member States have the responsibility to implement requirements for the safe operation of civil aircraft;

Whereas several European civil aviation authorities have established the Joint Aviation Authorities organisation (hereinafter called the JAA), as an

associated body of the European Civil Aviation Conference, to develop arrangements to co-operate on the development and implementation of Joint Aviation Requirements (JARs) in all the fields related to safety of aircraft and their operation;

Whereas It is appropriate to harmonise safety levels by establishing common requirements and procedures on the basis of JAA codes;

Whereas, to facilitate harmonisation, all Member States should become members of the JAA and the Commission should participate in the JAA organisations;

Whereas Member States should accept the certification of products, and organisations or persons concerned with the design, manufacture, maintenance and operation of products, without further technical work or evaluation, when the product, organisation or person has been certificated in accordance with the common requirements and procedures;

Whereas emergency problems in aviation might arise: whereas in such cases the Member State must take all appropriate measures: whereas a reason must be given for the measures and, where the reason is a shortcoming in the common requirements and procedures, the Commission should request the JAA to propose such amendments;

Whereas it is appropriate that funding by the Member States of research to improve aviation safety be co-ordinated to ensure efficient use of resources and to enable the maximum benefit to be achieved;

Whereas it is appropriate to delegate the power to the Commission to introduce new common requirements and procedures, or amendments to existing ones, as developed by the JAA, assisted by a committee composed of experts nominated by the Member States, in accordance with procedure 1 of Council Decision 87/373/EEC⁽¹⁾,

HAS ADOPTED THIS DIRECTIVE:

⁽¹⁾ OJ No L 197, 18.7.1987, p. 33.

This Directive shall apply to the harmonisation of technical, operational and administrative requirements and procedures in the field of safety of civil aviation with respect to:

- the design, manufacture, operation and maintenance of aircraft registered in the Member States of the Community.
- persons and organisations involved in these tasks.
- the mutual acceptance within the Community of certification granted by any Member State of the Community on the basis of these requirements and procedures.

Article 2

For the purpose of this Directive :

1. "certification" means the legal recognition that a product, service, organisation or person compiles with the applicable requirements. Such certification comprises the activity of technically checking the product, service, organization or person; and the formal recognition of compilance with the applicable requirements by issue of a certificate, licence, approval or other document as required by national laws and procedures.

in particular, certification of a product involves:

(a) the process of assessing the design of a product to ensure that it complies with a set of standards applicable to that type of product so as to demonstrate an acceptable level of safety;

- (b) the process of assessing an individual product to ensure that it conforms with the certificated type design:
- (c) the issue of any certificate required by national laws to declare that compliance or conformity has been found with applicable standards in accordance with paragraph (a) or (b) above.
- 2. "arrangements" means arrangements developed under the auspices of the European Civil Aviation Conference, to co-operate in the development and implementation of joint requirements in all the fields related to safety of aircraft and the safe operation of aircraft. These arrangements are specified in Annex 1.
- "product" means any civil aircraft, or aircraft engine, propeller, appliance, material, part or component to be installed thereon, new or used.
- 4. "maintenance" means the ongoing process of inspections, servicing, modification and repair throughout the lifetime of an aircraft needed to ensure that the aircraft remains in compliance with the certificated type design and consistent with a high standard of safety; this shall include modifications made mandatory by the authorities party to the arrangements in accordance with continuing airworthiness policy.
- 5. "national variant" means a national requirement or regulation imposed by a given country additional to, or instead of, a JAR provision. The national variants are indicated in the relevant JAR code.
- 6. "JAR" means "Joint Aviation Requirements", that is requirements developed and maintained by the JAA including procedural requirements in accordance with the arrangements.

- 1. Member States shall adopt as their sole national codes, and apply not later than 1 January 1993, the codes relating to the common requirements and procedures specified in Annex 2 and adopted by the Commission under Article 10.
- 2. Where by 1 January 1993, and as long as, a specific code is not adopted, Member States may use the relevant part of their existing national codes.

Article 4

- 1. Member States shall ensure that their civil aviation authorities meet the conditions for membership of the JAA specified in, and shall sign, the arrangements not later than 1 January 1992.
- 2. Member States shall take the necessary steps to enable the Commission to participate in the JAA organisations mentioned in point 4 of the arrangements.

Article 5

1. Member States shall accept products designed, manufactured, operated and maintained in compliance with the common requirements and procedures, without further technical requirements or evaluation, when the products have been certificated or approved by another Member State. When the original acceptance is for a particular purpose, or purposes, the subsequent acceptances shall cover the same purpose(s).

2. Member States shall accept products that have not been certificated in compliance with the common requirements and procedures subject to a technical assessment, by the JAA, to determine that the product's level of safety is broadly equivalent to that required by the common requirements and procedures.

Article 6

Member States shall accept the certification, granted by another Member State in accordance with the common requirements and procedures, of organisations or persons concerned with the design, manufacture, and maintenance of products, and operation of aircraft, without further technical requirements or evaluation.

Article 7

- 1. Where a Member State ascertains that a product designed, manufactured, operated and maintained in accordance with this Directive is likely to jeopardize aviation safety, it shall take all the appropriate measures. The Member State shall inform the Commission immediately of these measures and indicate the reasons for its decision, stating in particular whether the safety problem results from:
 - non-compliance of the product with the common requirements and procedures,
 - an inadequate safety level of the common requirements and procedures,
 - a lacuna in the common requirements and procedures with regard to the definition of the product or procedure.

2. The Commission shall enter into consultation with the Member States and the JAA as soon as possible. Where, after such consultation the Commission finds that the measure refered to in paragraph 1. Is justified, it shall forthwith so inform the Member States. Where the measure is attributed to shortcomings in the common requirements and procedures, the Commission shall ask the JAA to develop a new code or amendments to an existing code.

Article 8

The Member States shall take the necessary steps to co-ordinate, through the JAA, their programmes of research for improvement in safety of civil aircraft and their operation and to inform the Commission thereof. The Commission may take, in consultation with the Member States, any useful initiative to promote such coordination of policies and programmes of research carried out at national level.

Article 9

Member States shall ensure that the Commission is notified of : new or amended requirements and procedures when they are completed and agreed in accordance with the arrangement's procedures; and modification to the arrangements. They shall also inform the Commission of the extent and results of the consultation by the JAA with industry and other interested bodies.

- 1. The Commission is hereby empowered in accordance with the procedure set out in Article 11:
 - to make the necessary changes to the Annexes;
 - to adopt the codes relating to the common requirements and procedures specified in Annex 2, and amendments to those codes.
- 2. If a new code, or amendment to an existing code, developed by the JAA contains a national variant for a Member State, the Commission shall decide, in accordance with the procedure set out in Article 11, to make the variant applicable for all Member States, or not to include it in the common requirements and procedures.

Article 11

- 1. The Commission shall be assisted by a committee of an advisory nature composed of the representatives of the Member States and chaired by the representative of the Commission.
- 2. The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion on the draft, within a time limit which the Chairman may lay down according to the urgency of the matter, if necessary by taking a vote.

- 3. The opinion shall be recorded in the minutes; in addition, each Member State shall have the right to ask to have its position recorded in the minutes.
- 4. The Commission shall take the utmost account of the opinion delivered by the Committee. It shall inform the committee of the manner in which its opinion has been taken into account.

Member States shall, after consultation with the Commission, take the necessary steps to bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than 31 December 1991. They shall immediately inform the Commission thereof.

These provisions shall make express reference to this Directive.

2. Member States shall comunicate to the Commission all subsequent laws and administrative provisions adopted in the field governed by this Directive.

Article 13

This Directive is addressed to the Member States.

Done at Brussels,

For the Council

The President

ANNEX 1

ARRANGEMENTS REFERRED TO IN ARTICLE 2 PARAGRAPH 2

"Arrangements Concerning the Development, the Acceptance and the Implementation of Joint Aviation Requirements" signed on 6 December 1989 In Paris.

ANNEX 2

common Requirements and Procedures referred to the Article 3

The second of the second of the second

Subject

Adopted by decision of

the Commission on :

The state of the s

1. General and procedures

JAR 1

Definitions

JAR 11

General rule-making procedures

- 2. Type Certification of Products and Parts
 - a) List of Codes

JAR 22 Sailplanes and Powered Sailplanes

JAR 25 Large Aeropianes

JAR AWO All Weather Operations

JARE

Engines

JAR P

Propeliers

JAR APU Auxillary Power Units

JAR TSO Technical Standards Orders

Authorisations

JAR VLA Very Light Aeropianes

- JAR 23 Small Aeropianes
- JAR 23 Commuter Aeroplanes
- JAR 27 Normal Category Rotorcraft
- JAR 29 Transport Category Rotorcraft
- JAR 36 Noise Standards: aircraft type and individual certification
- JAR 39 Alrworthiness Directives and Retroactive requirements

b) Applicability

JAR 21 Certification procedures for products and parts

The JAR 21 code defines the code applicable to new products, new derivatives, existing products certificated to JAA standards and procedures, changes to a product etc.

The JAR 21 code states that the applicable issue of the code is defined taking into account the date of application for certification. In accordance with the bilateral agreements of the Member States, the date of application for imported products is the date of application to the primary authority.

The JAR 21 code also makes provisions for equivalent safety demonstrations or for additional requirements called Special Conditions which may be required, though not included in the airworthiness codes, for the certification of a specific product.

ANNEX 2

Page 3

3. Maintenance

(a) General

The maintenance of aircraft is a responsibility of the operator. Therefore the relevant requirements are specified in the appropriate JAR-OPS maintenance chapter (see paragraph 4 below). This chapter also covers the acceptance of the operators' maintenance arrangements. Such acceptance may be based on certificated maintenance organisations and certificated maintenance personnel.

(b) List of codes

JAR 145

Maintenance chapter: see paragraph 4 below

JAR 145

Certification of maintenance organisations

JAR 65 Sub-Part E Certification of maintenance personnel

(c) Applicability

The maintenance requirements apply to operators, organisations and persons and therefore cover, all aircraft, parts and components regardless of whether these aircraft, parts or components have been certificated to a common code.

4. Operations

- JAR-OPS Part 1 Commercial Air Transportation
 (Aeroplanes)
- JAR-OPS Part 2 General Aviation (all aircraft except helicopters)
 - Aerial Work
 - Corporate Operations
 - Private

JAR-OPS Part 3 Helicopters

- Commercial Air Transportation
- Aerial Work
- Corporate Operations
- Private

5. Certification of Persons

- JAR 61 Certification of Pilots and flight instructors
- JAR 63 Certification of Flight crew members other than pilots
- JAR 65 Certification of Aircrew other than flight crew members.
- JAR 67 Medical standards and certification.

ANNEX 2 Page 5

A CANAL TO THE STATE OF THE STA

6. Certification of Organisations

JAR 141 Pilot schools

JAR 143 Ground Instructors

JAR 145 Maintenance organisations

JAR 147 Maintenance personnel training schools

. .

en de la companya de la co

the state of the s

5 18 V 18 18 18 4 V

 $\mathcal{C} = \{ \mathbf{v}_{i} \in \mathcal{C} \mid ||\mathbf{v}_{i}||, |||\mathbf{v}_{i}||, |||| \leq \delta \mathbf{v}_{i} \}$

and the second of the second o

The state of the s

of the control of the property of the first of the control of the

the state of the s

.€ 90 % - % -

COMPETITIVENESS AND EMPLOYMENT IMPACT STATEMENT

I. What is the main reason for introducing the measure?

This proposal concerns the harmonisation of technical requirements and procedures and their application to civil aircraft.

This harmonisation will be based on the adoption of european Joint Aviation Requirements (JARs) and their application through the Joint Aviation Authorities (JAA) organisation.

II. Features of the business in question

All enterprises which manufacture aircraft and aviation products, and aircraft operators.

III. What obligations does this measure impose directly on businesses?

Aircraft and aviation products shall be manufactured, operated and maintained in accordance with the provisions of this proposal.

IV. What indirect obligations are national, regional or local authorities likely to impose on business?

Implementation of the obligations as described under III.

V. Are there any special provisions in respect of SME's?

None.

VI. What is the likely effect on:

a) The competitiveness of business

The internal competitiveness of enterprises manufacturing or operating aircraft and aviation products will be equalised by applying harmonised technical requirements and procedures.

Employment

No effect.

VII. Have the relevant representative organisations been consulted?

The representative organisations of aircraft manufacturers and operators have been consulted. Their opinions are as follows:

Aircraft manufacturers strongly support the proposals but believe the Commission should be requiring the establishment of a single european aviation administration as soon as possible.

The aircraft operators also support the proposals but are concerned about the possible introduction of a further layer of bureaucracy in an, already, highly regulated industry.

ISSN 0254-1475

COM(90) 442 final

DOCUMENTS

EN

07

Catalogue number: CB-CO-90-503-EN-C

ISBN 92-77-64734-5

PRICE

1 - 30 pages: 3.50 ECU

per additional 10 pages: 1.25 ECU

Office for Official Publications of the European Communities L-2985 Luxembourg