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**PROVISIONAL
ACCEPTABLE MEANS OF COMPLIANCE
FATIGUE STRENGTH OF AEROPLANE STRUCTURES**

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PROVISIONAL ACCEPTABLE MEANS OF COMPLIANCE

FATIGUE STRENGTH OF AEROPLANE STRUCTURES

FOREWORD

1. The Standards in Annex 8, Airworthiness of Aircraft, are of the nature of broad specifications stating objectives rather than the methods of realizing those objectives. In order to indicate by example the level of airworthiness intended by the Standards of that Annex, some specifications of a more detailed and quantitative nature have been included in the same volume under the title "Acceptable Means of Compliance". The Foreword of Annex 8 indicates the obligation under the Convention, resulting from the introduction of Acceptable Means of Compliance.

2. When the Annex was adopted on 13 June 1957, the Standards on the subjects: Aeroplane Performance, Strength under Flight Loads, Reciprocating Engines, Turbine Engines, Propellers, and Navigation Lights were supplemented by Acceptable Means of Compliance. The absence of provisions of that type pertaining to other subjects was considered either as recognition, by the Council, that the Standards in themselves defined a sufficiently accurate level of airworthiness, or as recognition, by the Council, that due to the technical developments going on in a subject at the time of adoption, it had not yet been possible to establish a more precise technical specification than that in the Standards themselves.

3. It is the essence of the Acceptable Means of Compliance that they permit variations in overall method as well as in detailed application. Therefore, Contracting States, in establishing national codes that will ensure compliance with the Standards, will sometimes need guidance as to the departures from Acceptable Means of Compliance that are suitable for the certification of aircraft other than those specified in their Range of Validity, and also as to the use of methods developed too recently to have behind them the suitable background of experience deemed necessary for introduction of an Acceptable Means of Compliance.

4. The guidance material is established by ICAO as "Provisional Acceptable Means of Compliance", a class of specification that does not impose any obligation under the Convention. The Provisional Acceptable Means of Compliance are not, like the Standards or the full-fledged Acceptable Means of Compliance, established by agreement between Contracting States; instead, they reflect an agreement reached by an international body of experts to the effect that a specification is worthy of trial.

5. Trial application of Provisional Acceptable Means of Compliance in national regulations or practices is intended to build up the amount of experience that, eventually, could lead to the introduction of an Acceptable Means of Compliance on the same subject.

6. The Provisional Acceptable Means of Compliance presented in this Circular was prepared by the Airworthiness Committee, a body of experts authorized by the Council and functioning under the Air Navigation Commission. The Airworthiness Committee proposed this Provisional Acceptable Means of Compliance in its fourth report, issued at the end of its Fourth Session which took place from 18 October - 15 November 1960. The Air Navigation Commission, after satisfying itself that this Provisional Acceptable Means of Compliance is properly coordinated with the Standards, the Acceptable Means of Compliance, and other Provisional Acceptable Means of Compliance and that the policies of the Organization have been followed, authorized issue of this Provisional Acceptable Means of Compliance at the fifth meeting of its Thirty-sixth Session, on 9 February 1961. It is to be noted that in so doing, the Air Navigation Commission did not pass judgement on, or endorse, the technical contents recommended by the Airworthiness Committee.

7. The Airworthiness Committee based this PAMC largely on the regulations and interpretative material which have been published by the United States and the United Kingdom and the provisions of which are incorporated in the design of a number of aeroplane types which have been in use for some years and of aeroplane types now coming into service. This PAMC contains specifications intended to provide for a level of airworthiness equivalent to that intended by the provisions in para. 3.7 of Part III of Annex 8. The applicability of the specifications in the PAMC is the same as that of Part III of Annex 8.