

Specification for

General requirements for equipment for use in aircraft —

Part 4: Electrical equipment —

Section 2: Electromagnetic interference
at radio and audio frequencies

UDC 629.7.05/.06:621.391.82

Foreword

This British Standard is part of a composite standard in the Aerospace Series of British Standards specifying general requirements for equipment in aircraft. An introduction to the complete standard is given in BS 3G 100-0.

This 1979 revision replaces the October 1973 version of 3G 100-4.2.

A major revision of BS 2G 100-2:1962 was undertaken in 1965 and the document was published as BS 2G 100-2.2:1967. This revision included, for the first time, requirements for the use of peak measuring equipment and also requirements to check the susceptibility of sensitive avionic equipment to r.f. signals and noise both conducted along power supply wiring and radiated. This revision ensured that some degree of correlation could be demonstrated between the British Standard and the various US military specifications and standards and also RTCA DO 138 which were taken into account in the discussions leading up to the revision. The standard was updated in 1973 and published as 3G 100-4.2:1973.

This current revision takes account of the considerable experience which has been gained in laboratories and test houses in recent years and also the results of surveys which have been made to determine the electromagnetic environment in a wide range of aircraft. In addition, due account has been taken of the requirements in current USA specifications MIL-STD-461A and MIL-STD-462, RTCA DO 160 and EUROCAE Publication ED 14.

The main changes in this revision include better definition of test conditions, particularly where circuit loading is concerned, revised levels for susceptibility tests including requirements for modulated signals, and separate requirements, which are generally more onerous, for military aircraft.

It has to be emphasized that although compliance with this standard will provide considerable improvement in the operational performance of the aircraft and its equipment from the interference standpoint it does not guarantee overall electromagnetic compatibility.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 23 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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