DIN EN 9227-2:2026-03 (E)

Aerospace series - Programme management - Part 2: Guide for reliability control; English version EN 9227-2:2025

Contents

Page

European foreword 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 List of acronyms 7

5 Principles of reliability control 7
5.1 Purpose of reliability control 7
5.2 Construction of reliability 8

6 Construction of reliability tasks 8
6.1 Purpose of the clause 8
6.2 Calculation tasks 8
6.2.1 Reliability goals and allocation 8
6.2.2 Reliability prediction 9
6.3 Analysis tasks 9
6.3.1 Risk analysis 9
6.3.2 Experience feedback 10
6.3.3 Functional analysis 10
6.3.4 Failure mode, effects and criticality analysis (FMECA) 11
6.3.5 Reliability and availability modelling 11
6.3.6 Design guides 13
6.3.7 Other analyses 13
6.4 Testing tasks 15
6.4.1 General 15
6.4.2 Reliability/durability characterization tests in the development phase 15
6.4.3 Use of integrated reliability growth tests (non-specific tests) 15
6.4.4 Reliability dedicated growth tests 16
6.4.5 Reliability demonstration tests 16
6.4.6 Measurement of reliability in series production 16

7 Management tasks 17
7.1 Reliability programme plan 17
7.2 Activity management 18
7.3 Programme reviews 18
7.4 Risk management 18
7.5 Failure reporting analysis and corrective action system (FRACAS) 18
7.6 Reliability assurance 19

8 Guidance for reliability control 19
8.1 General 19
8.2 Preparation phase 20
8.2.1 Objectives 20
8.2.2 Management tasks 20
8.2.3 Calculation tasks 20
8.2.4 Analysis tasks 21
8.3 Realization phase 22
8.3.1 Objectives 22

8.3.2 Management tasks 22
8.3.3 Calculation tasks 23
8.3.4 Analysis tasks 23
8.3.5 Testing tasks 23
8.4 Use phase 24
8.4.1 Objectives 24
8.4.2 Management tasks 24
8.4.3 Calculation tasks 24
8.4.4 Analysis tasks 25
8.4.5 Expected results 25
Annex A (informative) Task summary table 26
Bibliography 28