

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 |